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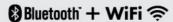
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NOIZE FROM THE EDITOR



ONE OF MY BIG SURPRISES WHEN I FIRST TOOK THE

job at Guitar Player in late 1997 was the ferocious controversy over the concept of "tone." I must admit I hadn't expended much critical thought about the sound of a guitar. By then, I had been playing electric guitar seriously for more than 20 years, and I had experimented with tons of different amps, effects, strings, guitars, and even early wireless systems. I knew what guitar sounds I liked for me, but I didn't focus incisively on the "colors" of other players. I was more concerned with hearing good songs driven by impassioned and unique guitar playing.

But, back in late 1990s, I found the "editor me" walking

smack into a major battle over whether early digital amps were devil's spawn or offered viable tonal options. I discovered some players didn't consider certain products to be "pro" enough to be awesomely hip. I watched readers tear each other to shreds over one's personal—and subjective in the extreme, I might add—definition of a "good tone" or a "bad tone." What kind of crazy world had I walked into?

Happily, the GP editors at the time—especially Art Thompson—rapidly devised an editorial strategy where we embraced all source sounds (tube, digital, solid-state, transistor, tone wood, pickup type, strings, unicorn magic) without prejudice, as long as they produced guitar tones that the staffers enjoyed (there's that subjective-reality concept bouncing around again). We've tried to stay true to that premise ever since.

But when you peruse the GP social networks today—or, for that matter, any guitar-oriented media—you still find players blasting away at other players over their tone, as if they were trapped in a Call of Duty firefight. I guess that's entertainment for some, and while I personally don't like intentionally hurting people's feelings, I get it. Extreme criticism is a part of the so-called "reality" of online engagement, where everyone is a star, everyone has a supremely valuable opinion, and the old "me generation" cliché of righteous self-aggrandizement applies to all outward communication.

It may sound like I'm bashing social media, but I'm really not. The world becomes a tougher place every day, and negotiating our position in it—along with our own self-worth and larger communal-worth—can be frightening. If bashing, say, a thin or muddy tone with a vicious or "witty" reproach helps cement your personal branding/ reputation as a player—or metes out tonal justice to those you consider offenders then have at it. We all need thick skins these days.

That said, the guitar community continues to evolve, and many younger players are envisioning the instrument and the gear associated with it purely as creative paint boxes. They don't seem to care much about the past, or whether SRV, Page, Beck, Hendrix, Gibbons, Johnson, or "Famous Classic-Rock Guitarist X" have kick-ass tones they should acknowledge and emulate. They sometimes deploy signal chains in strange and unusual ways—thanks to the total freedom of digital processors to toss anything anywhere.

As a community, do we recognize these "disruptions," or fear them, because they don't conform to "our" concepts of good tone?

This month's cover story, admittedly, looks at tone construction from the timehonored fundamentals. But this doesn't mean the staff is advocating one particular subjective definition of good tone over another. We simply believe that, whether you're a newbie or an experienced player, a clear and accurate understanding of the elements that create sound is a good thing to have in your mental toolbox. From there, the world is your oyster—conform or disrupt at your pleasure. For me, I just want to be astonished by some surprising guitar tones.

Which side of the bed are you on? Share with me whether you Disrupt or Conform by sending an email with the subject line "Tone" to mmolenda@nbmedia.com.

Thichael It



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As more and more powerful digital tools join the massive ranks of tube amps and analog effects out there, players now have so many options for crafting guitar tone that it can sometimes seem overwhelming. Well, take a breath. Let us demystify some essential sonic elements so that you can easily understand what they all mean, why they exist, and how they affect guitar tone. Knowing the basics of tonal architecture should help you craft guitar sounds that are more personal, more unique, and more awesome—and all without fear. Whether you're a tube head or a digital technologist—or an experienced pro or a beginner—there should be some "Eureka!" moments here to expand your sonic explorations.

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THE FIRST FIVE YEARS

As part of *Guitar Player*'s 50th Anniversary, we are celebrating the advertisers who believed in founder Bud Eastman's mad idea, and supported the infant magazine through its first five years, 1967-1972. They are: Acoustic Amps, Alfred Publications, AKG, Altec-Lansing, Ampeg, Bigsby, Bill Russell Capo, Black Diamond Strings, Carlsboro Amps, Coral, Danelectro, Darco Strings, Dunlop, Eko, Electro-Harmonix, Electro-Voice, Epiphone, Ernie Ball, Fender, GHS Strings, Gibson, Gretsch, Guild, Hagstrom Guitars, Hallmark, Hammond Organ (Leslie), Harmony Guitars, Heathkit, Hohner, JBL, Kustom, La Bella Strings, Martin, Mel Bay Publications, Messenger Guitars, Mosrite, Ovation, Peavey, Randall, Rickenbacker, Robb Guitars, Rowe/DeArmond, Sigma, Standel, Sunn, TWA, Vox, Yamaha. Thank you all!

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GPCOMMUNITY

PEER COMMENT



I got my first issue of *Guitar Player* in 1974. I love the lessons and I'm a huge fan of Jesse Gress. But I spend so much time going through stacks of issues—because I've kept every one—looking for certain lessons that I remember, but can't find. I hope you will consider publishing an index issue at some point so that I could track down my favorite lessons. Also, Molenda's March 2017 Noize from the Editor column was hilarious, because everything he said brought back all the same memories. Yes, I did have a '65 Mustang, my first guitar was an off-the-music-store-wall Decca electric, and the first band I learned from was the Who. I watched all the television shows he did, but I completely forgot about *Where*

The Action Is! I'll be 65 next month, and I've been playing guitar for 47 years. I've loved every minute of it, and your magazine is a huge reason why. —TONY HONSEY

South Sand

OOPS!

In our annual Pedalmania roundup in the June 2017 issue, we published the wrong price for the Vertex Dynamic Distortion. It's \$199 street. Find out more at vertexeffects.com. Our apologies for the editorial blunder.

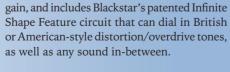
We also ran an incorrect image of the Xotic Soul Driven AH. It should have been the standard chrome version, as seen here. We're sorry about the mix up.



DANA'S JULY GP50 GEAR GIVEAWAY!

THANKS TO GUITAR PLAYER'S AWESOME MANUFACTURING

partners, we can celebrate our 50th anniversary by giving away "birth-day gifts" to our readers. This month, **Blackstar Amplification** offers its LT Drive and LT Dual effects pedals. The LT Drive offers valve-like response, a huge amount of volume on tap, and controls for Gain, Level, and Tone. The two-channel LT Dual delivers clean boost to high



For a chance to win one of these pedals, simply send an email with the subject line "GP50 Blackstar" to **mmolenda@nbmedia.com**. The deadline for entries is July 20, 2017. We'll select our winners at random and announce their names in an upcoming issue. Please note that all contest gear was actually reviewed by the *GP* staff, and will be "as is." Good luck! — DANA PARKER



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TRIBUTE

Dad and Me

BY MURALI CORYELL

WHEN LARRY CORYELL PASSED AWAY

in his hotel room in the early morning of February 19, 2017, I soon realized I not only lost my dad, but so many others lost a guitar hero dubbed, "the Godfather of Fusion." Larry died in New York, after completing a weekend at the Iridium Jazz Club. He was a true player to the end. Those who attended his final performance testified he was on top of his game, and he left to a standing ovation. I remember thinking at his memorial service that I would never have the pleasure and excitement of playing with him again. This makes carrying on his legacy all the more important.

Keyboardist Mike Mandel—a long-time bandmate and friend—recalls that while Larry was enrolled at college in Washington state, another student told him, "You'll never be as good as Dave Brubeck." This motivated Larry to practice relentlessly and dedicate his life to music.

Growing up as the son of Larry Coryell in the 1970s, I was surrounded by people like Miles Davis and Jimmy Webb. The result was I was so intimidated that I avoided the guitar until I was 15 years old. As a beginner, I remember struggling with the "easy" stuff, and, nearly in tears, explaining to my dad that I really wanted to be a good guitar player. He said, "Son, just worry about being a good person."

He shared with me something that John McLaughlin told him: "It's all about fingering. If it's too hard, you're not playing it right. If your hand hurts, change your

M. MONTREYS

technique." He recognized my attraction to blues music and steered me in that direction. Typical of many genius parents who often don't have the patience to teach their own children, my father sent me to his duo partner at the time, guitarist Brian Keane, for lessons. Dad told me to come back when I was "good enough" to play something with him. This is when every playing experience with him became a lesson in music and life. Learning about the music business was as much preparation for me as the actual learning of music itself.

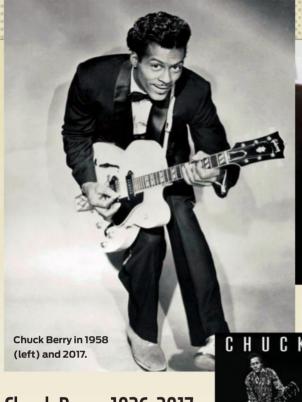
As I developed as an artist in my own right, and became a more proficient musician, my father was proud to feature me in his shows. Drummer Harry Wilkinson described Larry as "a positive instigator." Larry played and excelled at all genres of music. As much as he was known for dazzling and inspiring solos, he was an equally great rhythm guitarist. He once noted, "It

sounds like a symphony when I back you up. You need to do that for me!" This came in handy later, when I would work with Richie Havens, Duke Robillard, Joe Louis Walker, and others. There is an art to coming up with good complementary parts.

A benefit of having Larry as my dad was that he was able to show me how Jimi Hendrix played "Little Wing," "Foxy Lady," or any other song. He also taught me the correct 9th-chord voicing for "Hideaway" by Freddie King, as well as his own works I admired such as "Elementary Guitar Solo #5." Another benefit was his connection with so many great musicians. He gave me John Scofield's phone number when I could not figure out the changes to his song "Protocol," and this is when I found out from John: "There are no set changes. Improvising is based on an ostinato bass line."

I was proud to feature my father on some of my own recordings. One stand-out session was the recording of "Mother's Day," a song about the passing of my mother, Julie, dad's first wife. This was a subject deeply personal to both of us, and the emotion can clearly be heard.

When he passed, I felt that some part of my dad's spirit went into me. Recordings, children, and knowledge are all forms of immortality. Dad left a legacy of all three. And yet, a tremendous amount of talent and knowledge was lost with the passing of Larry Coryell. Through a career that spanned six decades, he lived through some of the most turbulent and creative points in music history. He was a pioneer in his field. He changed the way people played. But, never one to rest on his accomplishments, he was always seeking the next musical challenge-including writing and performing two full-length operas. Perhaps Bernard Purdie summed Larry up best when he said, "He just wanted to play."



who could really play, he couldn't find a job playing jazz, if you see what I mean."

Chuck Berry, 1926-2017

IT'S ALMOST SUPERNATURAL.

Listen to any of the songs on Chuck Berry's posthumous final album, *Chuck*, and you'll hear a strutting, cocksure rock-and-roll rebel, instead of a very old man quietly fading into history. This is a guy who announced his new album at 90, still drove himself to gigs at 88, kept his marriage together for 68 years (he dedicated *Chuck* to his wife, Thelmetta), and even learned how to use Pro Tools in order to work on his tracks. When he died on March 18, we not only lost one of the architects of rock music, we also bid adieu to probably the closest thing guitarists may ever have to an eternal flame.

For our March 1988 issue, *GP*'s Tom Wheeler talked to Berry before a show at the Circle Star Theater in San Carlos, California. To celebrate the father of rock and roll, we've excerpted some of Berry's quotes from Tom's wonderful interview. —MM

"I got my first electric from Joe Sherman, who played The Sacred Heart Club—a religious program on WEW in St. Louis. He'd got a new one, so he let me have his old one

for \$30. I was making \$10 a week, and he let me take it after I'd paid a \$10 installment. I really started to play a lot after that. It looked so good, you know, and it was easier to play than the other ones I'd had."

"What I do is just a portion of all that I've heard before me. I was attracted to the simplicity of Carl Hogan with Louis Jordan and His Tympany Five. He stuck to the I-IV-V, played mostly quarters and eighths, and played right on the beat. Also, blues players like T-Bone Walker. Definitely, Muddy Waters. His sound! Illinois Jacquet [tenor sax], too—big influence."

"I really wanted to comp chords behind a big band and play swing tunes. At the time I started playing rock and roll, I was in need of a house and a wife, and looking forward to raising a family. Even my friend Ira Harris, "I still do not recognize any style of my own. If someone can play everything I can play, and that's the way he plays, then maybe it's his style now. That's how I look at it."

"My success [in 1955]—the only thing it changed was my determination to follow through as long as it could go. My lifestyle did not change one bit. I had been saving 80 percent of my income as a carpenter, and I saved 80 percent of my income as a musician. I didn't give a sh*t about fame, and you can print that. Still don't. The only thing I cared about was being able to walk into a restaurant and get served, and that was something I should have had anyway—without all the fame."

"Things like 'Johnny B. Goode' and 'Carol' were for the mass market. 'Wee Wee Hours'—that was for the *neighborhood*. But this isn't a black/white thing. That irks me. There's no such thing as black and white music."

QUICK TIP

NO FUZZ. NO COMPRESSOR. NO BOOST.

"You should have to work for sustain—not just throw a switch. The way I do it is to think of the fret as a violin bow and the guitar string as a violin string. Then, by moving the string along the 'bow' [fret], I can get sustain—even at a low volume. It's an old blues players' effect."

-THE LATE J. GEILS, WHO PASSED AWAY ON APRIL 11, AT 71 YEARS OLD.





ANNIVERSARY

Satch's G4 Experience to Celebrate "Surfing" at 30

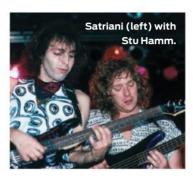
BY MICHAEL MOLENDA

JOE SATRIANI HAS AN INTER-

planetary gala planned for attendees of his 2017 G4 Experience, July 24-28, at the Asilomar Center in Carmel, California. For the 30th anniversary of his monumental 1987 release, *Surfing with the Alien*, Satch is bringing together the team that brought the studio-

overdubbed album to life on stage—bassist Stuart Hamm and drummer Jonathan Mover. This is the first time since 1995 that the trio has performed together.

"The album was a super studio affair—an overdub fest," explains Satriani, "and it was left to me to find two guys to make it work live. I had no experience being an instrumental-rock guitarist, so at the first gig, it was like, 'How are we going to play this record as a *show*?' And Stu, Jonathan, and I decided, 'We may not have money for lights and video, but we can definitely play, so



and see what people think.' It was pretty obvious from the very beginning that, as soon as everyone was allowed to just do their

let's just go crazy

thing, it became very appealing."

"Well, it wasn't exactly open season," remembers Hamm. "Joe's records are always very orchestrated, and I respect that. I believe what separates him from a lot of other guitarists is how wonderful and memorable his melodies are, and you don't want to mess that up with an overactive rhythm section. But there were moments that were open to interpretation. For example, when we did 'Always with Me, Always with You,' I figured out I could play *B*, *D*, and *A* on the *E* string, and tap the rhythm

guitar line on the *D* and *G* strings to play both parts simultaneously. I didn't invent that technique, of course, but I was one of the first guys to get there on the bass, and it blew people's minds."

"Stu and I came from a more progressive rock and fusion background," adds Mover. "So we were accustomed to listening to the other musicians, making spur-of-the-moment decisions, and jumping on their band wagons when they went off in different directions. We were very lucky to be playing with a guitar player who was totally open to that. Joe could follow us if we went somewhere, and if he went off on a tangent, we'd hear it and immediately go with him. The benefit there is that new things happen every night. I think all three of us encouraged each other—which was really nice."

The 2017 G4 Experience will allow its campers a once-in-a-lifetime opportunity to get deep inside the studio and stage secrets of *Surfing with the Alien*—and all shared by the people who created it.

"This is an intimate venue, and there will be no secrets," promises Satriani. "Everything will be revealed."

More Online! For the complete interviews with Satriani, Hamm, and Mover, click to guitarplayer.com.

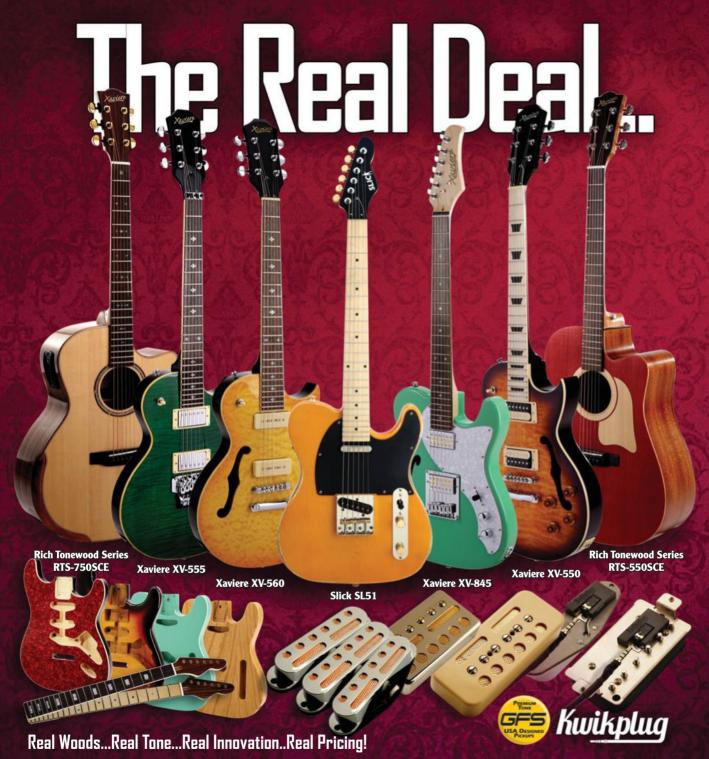
NOISEMAKER OF THE MONTH

EarthQuaker Devices Erupter Perfect Fuzz By MICHAEL MOLENDA

LIKE A KISSIN' COUSIN OF JOE GORE'S DUH REMEDIAL FUZZ, THE BRAND NEW ERUPTER

Perfect Fuzz has a whimsical name, one big ol' knob, and a footswitch, and that's all it requires to unleash a tempest of gorgeously savage caterwauls of pungent aural fury. Yep—this was the sound of the Erupter (\$145 street) through a Vox AC30, a humbucker-equipped Framus Panthera Supreme II, and a single-coil California Guitars T-style. Although there's no Level control here, you get a reasonable signal boost when you hit the switch, as well as an increase in low-midrange frequencies. The amount of mayhem depends on which side you set the Bias knob. (It's like a vastly more ferocious take on those Left Twix/Right Twix commercials.) Full Left Knob produces gritty, glitch-y spittle that can sound something like a robot having a psychotic episode. The Erupter is very dynamic, so a soft attack can crate 8-bit synth-like sounds, while full-on pummeling simulates overdriving a mic preamp (think "Street Fighting Man"). Full Right Knob delivers textured saturation, more low-end boost, extreme compression, and some underlying midrange artifacts that almost make it sound as if you doubled your parts. The center position is for those with weak tummies—it produces a less-tormented, early '60s-style fuzz tone with incredible sustain, taut lows, and a sweetly articulate attack. The true-bypass Erupter—made in Ohio with hand-matched NOS silicon transistors—may not be for the weak of heart, but it's one badass machine for the daring and the crazy, **earthquakerdevices.com**





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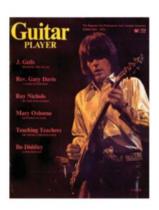
PRO'S REPLY



Bo Diddley

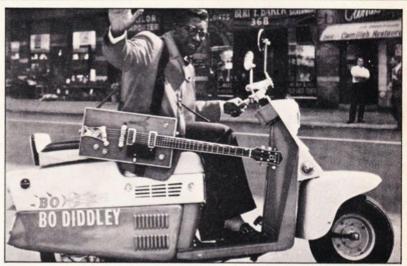
February 1974

One of GP's fab content innovations was its "Pro's Reply" columns that brought readers into the worlds of professional sessions and live performances, and offered insights from guitar stars. We're celebrating that grand idea by republishing some of the most interesting bits from the "Pro's Reply" archive. —MM



PRO'S REPLY

Bo Diddley



The following questions were submitted by Ron Stacker of Monterey, California:

What is the name of that rectangular guitar you use?

I call it the "Big B." I had always wanted a guitar that was different, that would be me. I wanted something that would be just mine and no one else's. So I went to the Gretsch company and asked them if they could make one for me. They said sure, so I told them what I wanted it to look like and what I wanted in it.

How is it different from any other guitar?

I can only tell you that the pickups are wound different. I'm not going to say how, though. And I can't tell you what else is unusual about it. Those are my own secrets, but you can take it from me that it's just different and it's good.

Is there just one of these guitars, or are they mass produced?

There are four all together and I have them all. Gretsch won't put out a Bo Diddley model and I really don't know why. I had the first one made in 1958 and the second one built in 1960. Then I got two more back in 1962.

I had heard that one of your guitars was stolen, is that true?

Yeah, but I got it right back. After all, what can a guy do with one of these if he swipes it? Nothing! He can't play it anywhere and he can't even show it around, because as soon as somebody sees it, they know it was stolen from Bo Diddley, because mine are the only ones made like that. That's what's so good about having your own guitar.

How much did it cost to have your guitar made?

It was about \$900,00.

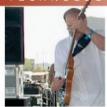
Are the strings any different than regular guitar strings?

No. I just use some kind of real heavy-duty ones but I really don't know the name of them.



Riffs

TECHNOLOGY



Perfect Pitch—for Guitar!

BY CRAIG ANDERTON

TUNING IS PART OF PLAYING GUITAR,

whether you use a conventional tuner or automatic tuning. However, *all* tuning methods have a major limitation: They can tune only the open strings.

Frets are set to an even-tempered scale, which has inherent pitch errors. Furthermore, when you first pluck a string, it's under more tension, so it starts sharp before it settles down to its final pitch—and even that "final" pitch canvary by several cents over the string's decay. In live performance, these small tuning errors aren't much of an issue. But in the studio, the guitar may be in a mix along with perfectly tuned instruments such as electronic keyboards. Although many pitch errors may be desirable for adding "character," others might be problematic. Fortunately, there's a solution.

ENTER MELODYNE

Celemony's Melodyne is associated with

vocal-pitch correction, but it does much more. I've used Melodyne on bass, guitar, and ukulele, with both monophonic (single-note) and polyphonic (chords) playing. There are several Melodyne versions. Melodyne Editor (\$499) and

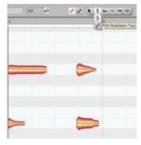


Fig. 1—The "blobs" represent guitar notes.

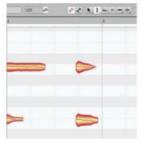


Fig. 2—The pitch has been "flattened" so the notes don't start sharp.

Melodyne Studio (\$849) can edit polyphonic material, whereas Melodyne Assistant (\$249) and Melodyne Essential (\$99; also included with PreSonus Studio One, Cakewalk SONAR, and Acoustica Mixcraft 8 Pro Studio) handle only monophonic material.

Figure 1 shows notes—represented by "blobs"—after being analyzed by Melodyne's Polyphonic detection algorithm. You can move blobs up/down to change pitch, snap to a scale, or move left/right to change timing. You don't have to correct to perfect pitch. You can quantize to within a certain percentage of perfection.

Note the red line within each note that shows pitch, and how each note starts a little sharp. Figure 2 shows the same notes after using Melodyne's Pitch Modulation tool, which corrects for pitch changes, and even lets you "flatten" pitch variations within the note itself. Now, the note

is not only right on pitch when plucked, but the decay has also been flattened to a more stable pitch. By overcompensating, you can even choose to exaggerate the instability, have the note start flat and rise up to pitch, or cut the note into pieces and process some pieces but leave others as is.

Traditionalists may object to correcting pitch, and I certainly don't think you should apply this universally. Tuning variations and instabilities add interest to a vibrating guitar string, so I recommend fixing pitch only if it actually sounds wrong.

But even if you use this technique rarely, you may find that the guitar part you thought you were going to have to do over doesn't need anything more than a little digital magic.

GUITAR PLAYER PODCAS

No Guitar Is Safe Episode 42: Ben Lacy

BY JUDE GOLD

It's easy to describe Ben Lacy as a "one-man band," because

he has a stunning talent for seamlessly weaving guitar, bass, drums, percussion, keyboards, and vocal melodies into crowd-pleasing solo pieces. But the bigger story is that Lacy is one of the *funkiest* guitar players ever to pick up the instrument. Just listen to him perform solo renditions of "Kashmir," "Fame," "Get Lucky,"



or "Sir Duke" on the podcast. There are no loopers, octave pedals, or extended-range guitars involved in Lacy's impressive "stacks of parts" (as he calls them)—just a Brian Moore i2 6-string, a set of .010-.046 Elixir Nanoweb strings, an Electro-Harmonix Holy Grail Nano (for emulating an ambient, John Bonham-style "snare drum").

and a bass amp (for maximum "wumph").

"For a snare sound, I typically pop the *D* string while muting it with my fretting hand, like bass players do," says the Kentucky-based guitarist. "The word 'percussion' in conjunction with guitar is kind of novel. I aim to take things further. I want to be an actual

drummer on guitar."

But, before Lacy found his groove focus, he went through a head-banging phase.

"In that glorious metal year of 1986, I was right in the middle of it, playing metal," he says. "But soon, I was like, 'I can play fast, so what's next?' I discovered Aquarium Rescue Unit, and then I got into this deep James Brown/Stevie Wonder thing. I quickly realized that it's the groove that moves me the most. What's nice about playing James Brown tunes is that you often have five or six things going on at once that don't interfere with each other. That's a cool thing when you're arranging that stuff for one guitar."

Hear Lacy's complete interview—and jams with host Jude Gold—by streaming GP's No Guitar Is Safe on iTunes, Soundcloud, Google Play, or wherever you get your podcasts.



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More Info magnatoneusa.com



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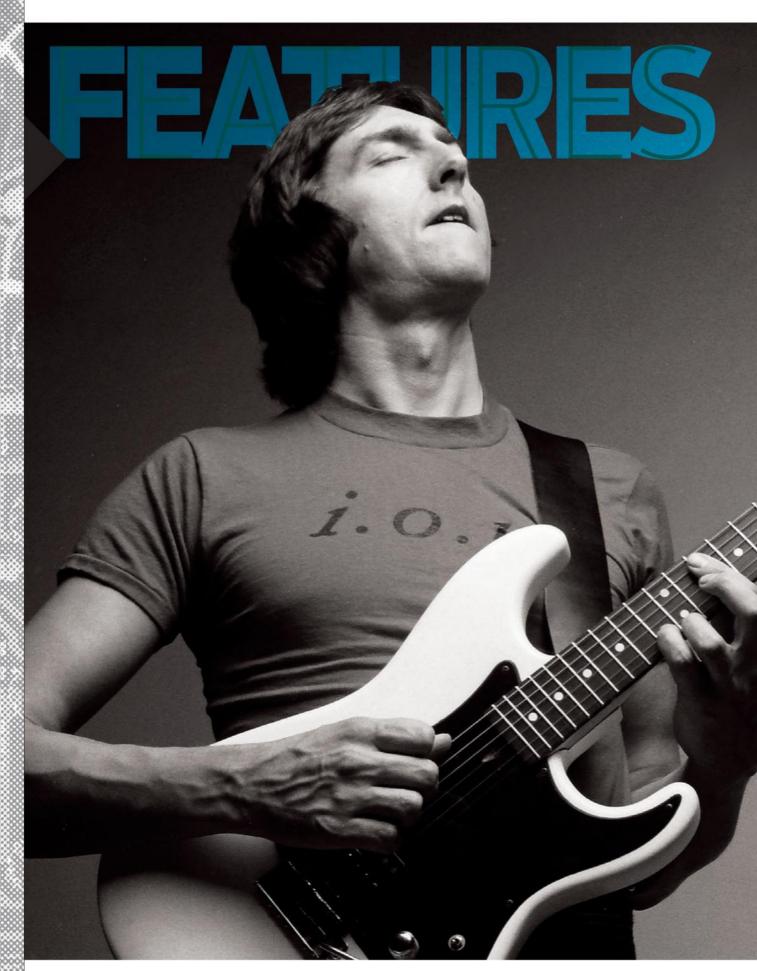






GB91/2 set for Electric and BB20X for Acoustic. Rocktron Mike Orlando Signature Wah and Rocktron Banshee. New Album 'We The People' Spring 2017

Mike Orlando photography by Danny Sanchez



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REEVES GABRELS AND CARL VERHEYEN PAY TRIBUTE TO

Allan Holdsworth

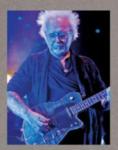
ALLAN HOLDSWORTH'S DEATH FROM HEART DISEASE ON APRIL 15, 2017, WAS

a stupefying shock. It was a blow to lose him so suddenly, and after a series of Southern California shows right before his death where family friend (and administrator of the unReal Allan Holdsworth Facebook Group) Manning Bartlett marveled, "He was still searching and growing. His harmonic complexity was even more astounding than ever. He wasn't resting on his past or going through the motions. He was continuing to evolve as a musician."

Guitar Player had just reviewed his new box set, *The Man Who Changed Guitar Forever!*, and we were hoping he would make himself available for interviews, as he had done so graciously in the past to hold our readers spellbound with his insights on creativity, technique, tone, and composition.

But it was also a shock to fully understand that his sublime artistry was never repaid in even bare-living wages—to realize that he had to sell gear to survive; or that during his last shows, he had to rely on fans to put him up for the night, or he'd have to sleep on the floor of the venue; or, finally, that his family and friends had to start a GoFundMe campaign to put this sweet and unassuming genius to rest.

However, these are woeful truths we will have to absorb and discuss as the full impact of Holdsworth's loss to the community of guitarists and musicians unfolds. For now, let's celebrate his artistry with tales from two brilliant players who were inspired greatly by his virtuosity. —MICHAEL MOLENDA



A SHORT REMEMBRANCE

BY REEVES GABRELS

IN MY LIFE AS A GUITAR PLAYER, there are few pivotal musical moments. I think I am not alone—at least among those of us who came

up in the '80s and '90s—for whom hearing Allan Holdsworth for the first time was exactly that. All one needs to do is look at the change in Eddie Van Halen's playing between *Van Halen* and *Van Halen II* to see the impact—a debt that Eddie later paid by securing a deal for Allan for *Road Games*. Listen to any of us who popped into the public eye in that time period—Eric Johnson, Satriani, Vai, Shawn Lane, Vernon Reid, etc. The list is endless, and the best of us incorporated what Allan taught us as DNA we could splice onto our own, and grow a new branch. Other's less so.

In 1976, a drummer friend turned me on to the new Tony Williams Lifetime album *Believe It*. All it took was Allan's opening track, "Fred," and nothing was ever the same. A door opened that would never close again. Over the years, Allan became a kind of musical imaginary friend to me. I tracked down every album I could that he appeared on—solo, band project, and guest appearances live or in the studio. Each album was a sort of letter—a musical correspondence that said, "Hey, check this out. This is what I am hearing now."

You see, the thing about Holdsworth was that he didn't have a bag of tricks. There were no pat riffs, no fall backs, or get-out-of-jail-free lines in his playing. He put the time into studying horn players and keyboard players (not guitarists), and evolved his own unique chord voicings and corresponding scale patterns. He was a pure improviser and musician who told his story in the moment, as deep and real as any blues, and as complex and modern as any contemporary composer.

Allan was a true gentleman (who never had harsh words for fellow musicians). I often think of jazz clarinetist

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FEATURES

>>> ALLAN HOLDSWORTH

Artie Shaw's comment when an interviewer asked him the difference between himself and his contemporary, Benny Goodman. Shaw's response: "Goodman plays clarinet. I play music."

At the end of the day, that is the difference—with few exceptions—between

Holdsworth and the rest of us guitar players.

I think the true lesson is in the individualistic concept. The dedication to the muse. The nobility in pursuing the art. And, to Allan, the words "thank you" are not enough. My eternal love, maximum respect, and undying gratitude. Play on.



Sheets to the Wind."

MY HUMBLING JAM WITH ALLAN HOLDSWORTH

BY CARL VERHEYEN

WHEN I FIRST METAllan Holdsworth in

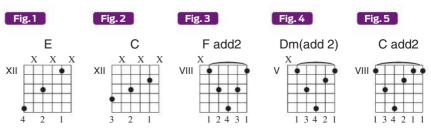
the '70s, he invited me over to his house to jam. All I knew about him was what I'd heard on Bill Bruford's *One of a Kind* album [1979]. With one listen, it was instantly apparent that this was a very different guitar player. Sitting across from the innovative genius and playing with him was already intimidating enough, but, one day, we decided to play his new song "Three

To my ears, his concept for chord melody seemed to be aligned with Ted Green's famous book *Chord Chemistry*, in that the three notes in a major triad may be voiced on any trio of strings, using any combination of intervals. Notice the *E* chord in **Fig. 1**. The third, *G#*, is on the bottom string with the root in the center of the chord and the fifth on top. (Use either hybrid picking or straight fingerpicking to sound the notes together.) The *C* triad in **Fig. 2** *compresses* the outer notes, as they contract in contrary motion from the previous chord, while the *E* note on the fourth string stays common to both voicings.

This concept of spreading out the notes of a chord into wide-interval voicings like this resonated with me years later, when my own chord vocabulary began to develop. I find it interesting that sometimes we learn something we're not yet ready to absorb and apply, but, years later, the light bulb goes on and we get it. But on that first day, I was instantly humbled when Allan showed me the chord voicings he used for the soloing changes in "Three Sheets to the Wind," because my left hand couldn't form the shapes quickly and cleanly enough. I limped home with my tail between my legs, and the next morning I locked myself in a room with a guitar. I refused to come out until I could go from a first position *C* chord to each of the widegrip, pinky-stretch voicings illustrated in Figures 3-5—each of which includes a note cluster of a minor- or major-second interval.

From a first-position "cowboy" *C* chord, keep your second finger on the fourth string and slide it up to the *C* note at the 10th fret. Now, try to lay your fingers down simultaneously on the rest of the notes in Fig. 3, thrusting your pinky out there to grab the third string's *G* note at the 12th fret. Practice this *C-Fadd2* change over and over again, until the first-finger barre and other three fingers learn to come down all at once. Then, practice switching back and forth from *Dm(add2)* to *Cadd2*.

It took a little while until I could get these kinds of unorthodox chord voicings under my hands and incorporate them into my playing. But that was Step One. Step Two—actually blowing over those changes—was a much harder challenge. I'm still working on that 40 years later.



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Government Takeover

WARREN HAYNES RETURNS TO GOV'T MULE FOR REVOLUTION COME, REVOLUTION GO

BY VINNIE DEMASI

IT TAKES A FAIR AMOUNT OF talent, poise, and maturity for a young upstart to fill the shoes of a legend. To create one's own legend in the process is nothing short of extraordinary.

Such is the myth-worthy tale of Warren Haynes, who was drafted by Dickie Betts to join a re-vitalized Allman Brothers Band in 1989. and went on to become an integral part of the lineup, celebrated for his songwriting ability, lead vocals, and incendiary guitar playing. In addition to his his long-standing association with the Allmans through the band's final shows in 2014, Haynes has recorded, performed, and/or toured with the Dave Matthews Band, Phil Lesh and Friends, the Dead, Blues Traveler, David Allen Coe, and others. He recently teamed up with Don Was to produce The Last Waltz 40 Tour, a series of all-star concerts commemorating the 40th Anniversary of the Band's iconic concert movie.

Havnes' main mistress for the last few decades, however, has been Gov't Mule—a group originally formed as a side project with late Allman Brothers' bassist Allen Woody and drummer Matt Abts in 1993. Sustained intermittently between stints with the Allmans, Gov't Mule released myriad live and studio recordings, and became a mainstay on the summer festival circuit. The band's current lineup features keyboardist Danny Louis and bassist Jorgen Carlsson alongside Haynes and Abts, and now, in the wake of the Allmans' retirement, Haynes is ready to go with what he

describes as "full-tilt Mule," touring in support of his band's latest release, the fiery, politically charged *Revolution Come*, *Revolution Go* [Fantasy].

Did the fact that you started tracking Revolution Come, Revolution Go on election day impact the recording or writing of the material?

There have always been some political connotations in my music going back to my first solo record in '93, and the first Mule record in '95. This one may be a little more politically slanted, or maybe it just feels that way because of the title and the times we're living in. I think it definitely carried over into some of the lyrics, as well as the overall intensity of the music. One thing I can definitely say is that, guitar-wise, I used different sounds and different influences more than I ever have in the past.

How so?

I probably play a Les Paul more than any other guitar, but it's only on a few tracks this time around. As far as Gibsons go, I played Firebirds, ES-335s, and a custom-designed Les Paul 12-string. On the title track I also used a Gibson SG tuned down a whole-step [D, G, C, F, A, D, low to high]. Aside from those, I used a 1958 Gretsch hollowbody, and, for the first time in the history of Gov't Mule, I played a Telecaster on "Stone Cold Rage" and "Drawn That Way." I was really looking to find some new voices that I hadn't utilized in the past, and I tried to let the song guide me as to the best choice, guitar-wise.





It sounds like there's some cool layering on "Thorns of Life."

That's the 12-string Les Paul and a regular Les Paul through a Hughes & Kettner Tube Rotosphere. The Les Paul was recorded live with the basic track, and the 12-string was overdubbed later. The majority of the solos were live—although I did overdub a few. I'm a big fan of recording live to catch the chemistry and the interplay. I think it's more fun to play and to listen to music where there's a lot of conversation between the instruments. Usually, if there's a rhythm guitar behind a track it means the solo was added later.

Is your recorded sound always a miked amp, or did you use any digital processing?

It's always tube amplifiers. I have a Bob Bradshaw setup that allows me to run three different amps at once with any combination of effects I choose. Usually I have two big amps—a modified, 100-watt Soldano

SLO 100, and a 50-watt Homestead—as well a small Alessandro amp that only has volume and tone controls. I usually only run through one amp at a time live, but I find that running through a small amp in the studio helps fill out the midrange nicely. All of the sounds you hear on the record are a combination of two or three amps.

Do you use any stompboxes to drive your amps?

Sometimes I'll kick in a Klon Centaur pedal, but most of the distorted sounds are just my guitar into the amp. I find I can get a lot of different tonal variations just by playing with the Volume and Tone controls on my guitar. Also, I rarely turn my Volume knobs all the way up. It's usually only when the whole band is playing at its loudest that I have my guitar's Volume at 10. I actually love the sounds I can get by setting the Volume knobs of each pickup differently. If I'm using both pickups, I often set one pickup hotter than the other.

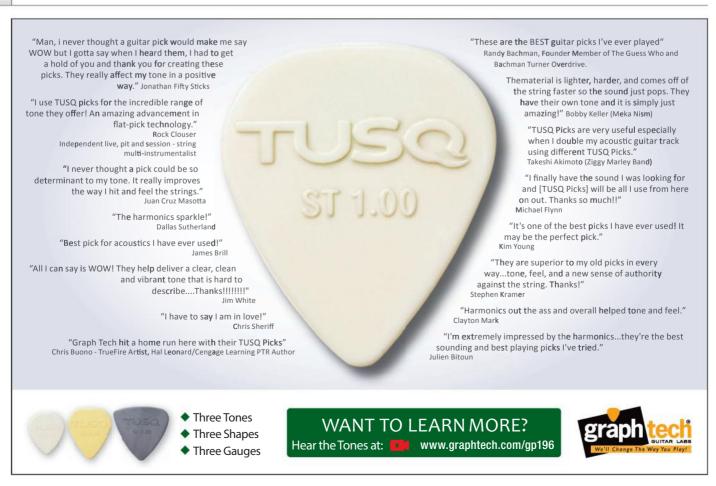
I believe that part of the beauty inherent in playing a Gibson is manipulating the Volume and Tone knobs to find different sounds. There's a world of tone in there. When playing live, I'm constantly working the knobs. I'll almost never leave them on one setting for an entire song.

Can you talk about your approach to playing slide?

I usually pick notes with the fingers on my right hand, and I use the other fingers to dampen the strings I'm not playing. I wear the slide on my left-hand ring finger, and I'll dampen somewhat with my left hand fingers, too. For example, if I want a brasher sound, I may ease up pressure on my left hand index finger.

Are you still using Coricidin bottles as slides?

I still like the way they sound, but I've been having a problem with moisture getting trapped inside the bottle and messing with the callus on my ring finger. I've



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switched to open-ended Dunlop slides, which are painted on the inside. My old guitar tech, the late Brian Farmer, started doing that, and it actually serves a dual purpose: it looks cool and psychedelic, and it helps the slide stick to your finger. We're toying with the idea of coming out with a signature slide, because I think it's an interesting and useful idea.

What was it like working with Jimmie Vaughan on "Burning Point"?

When I originally wrote and rehearsed the song, it had a New Orleans vibe. Then, I changed from playing it in the key of *D* to the key of E, but on a guitar tuned down a half step $[E_b, A_b, D_b, G_b, B_b, E_b, low to high]$. I thought this gave it much more of a Texas

sound, so we decided to invite Jimmie in to play. Our guitars are panned left and right, and you can hear the interplay between us. It was really inspiring, because Jimmie has a completely different approach to playing than I do, and he thinks of things I would never have thought of.

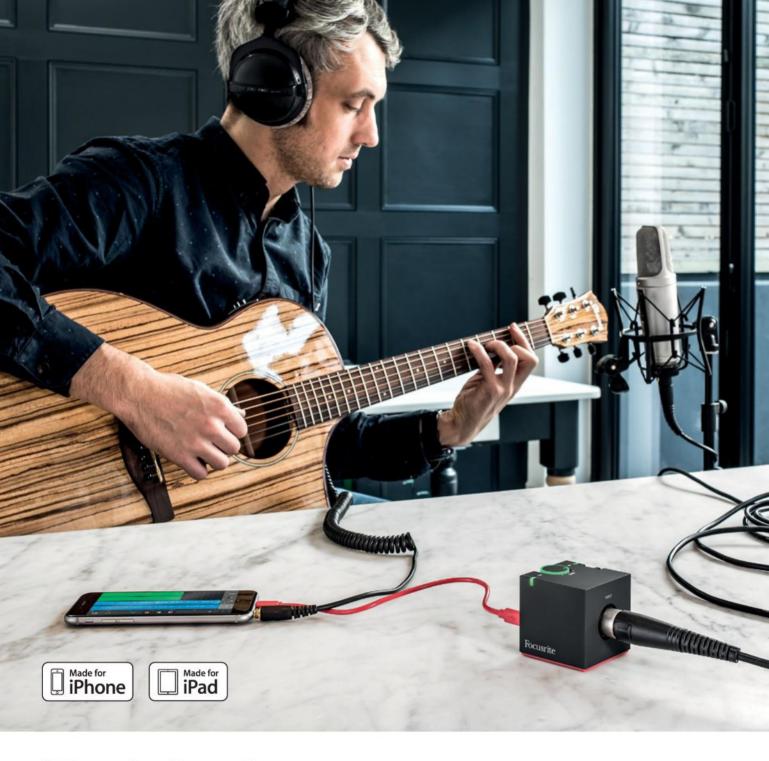
Despite making some tightly arranged, well-produced albums, Gov't Mule is known for its improvisational approach in concert—which seems to be what the audience responds to most about your music.

It's what we've always been about. We probably couldn't play something exactly the same way twice if we had to. Certain songs tend to be more similar night by night, but others will get reinterpreted drastically from show to show. We generally keep the middle sections wide open, and we let the jams go wherever they're going to go. That's one of the reasons we change up the set list so much. If we're playing four nights in a venue, it'll be four different shows. It's partially because the audience keeps coming back, and we feel they deserve to hear a different show each time, but it's also partially for us. We like to forget about how we may have played a song the last time, so when it comes up in the set list again, we'll have a completely new take on it.

When stepping into a playing situation with bands that have a long history. such as the Allman Brothers, Phil Lesh and Friends, or the Dead, how do you approach the music's legacy?

Well, I've always said that once a band loses a member, it can't recapture the same chemistry. But it can hope to find a new chemistry that rivals the old one. When I joined the Allman Brothers, they really encouraged me to be myself. It was always up to me how much of Duane's influence to interject into the music, and that was often a line I drew on a moment-by-moment or night-by-night basis. I feel that a certain amount is appropriate and necessary to make the music authentic, but to just stay in that school and not be yourself won't create that new chemistry. When I toured with Phil Lesh, he wanted to reinterpret the music, and take it in a whole new direction, so he specifically didn't want someone who played like Jerry Garcia. In order to do something like that authentically, though, I feel that you have to understand what came before so you know what you're building on.





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FEATURES

The Godfather of Fusion

AN UNPUBLISHED INTERVIEW WITH LARRY CORYELL

BY BRIAN TAROUIN

LARRY CORYELL WAS ONE OF THE

most influential guitar players of the 20th Century and beyond. His pioneering style of jazz-rock electric-guitar playing in the 1960s was revolutionary, and it spurred the entire fusion movement that came of age in the 1970s—especially when Coryell formed his own jazz-fusion band, The Eleventh House, in 1973.

I was very fortunate to work with Coryell in late 2016—a few months before his passing at 73 years old on February 19 of this year—when he contributed to my album *Orlando in Heaven*. The album is dedicated to those who lost their lives in the June 12, 2016, Pulse nightclub shooting in Orlando, Florida. Partial proceeds from *Orlando in Heaven* will benefit Catholic Charities of Central Florida, which provides support services for the Pulse victims and their families. Coryell lived in Orlando at the time of the attack.

"I was in the hospital recovering from complications from a sinus surgery, and I thought the nurses were joking when they told me the whole thing," remarked Coryell when I took the opportunity to interview him about his career in between sessions. "I was in a state, because I was literally on the eighth floor of the hospital where the victims were brought into the emergency room. I felt so bad. What occurred at the Pulse nightclub should never happen again. We artists have to do everything we can to educate and enlighten and inspire the world in which we live."

Highlights from our discussion—which remained unpublished until now—are shared here for *Guitar Player* readers. I hope they serve to celebrate Coryell's life, as well as offer insights that all guitarists can learn from and take as inspiration.

THE NAME

"I was born as Lorenz Albert Van DeLinder III," said Coryell. "My biological father was a jazz pianist named Lorenzo Albert Van DeLinder, and my mother was interested in him partially because she was hoping he would teach her how to play piano like he did. But, after I was born, he already had another girlfriend that he had made pregnant, and my mother never saw him again. I would have liked to see what he looked like, and I would have loved to hear him play. In 1948, my mother married Jean Coryell, who was a great guy, and he adopted me."

THE GUITAR

"I was told by my parents that I started playing the piano at the age of four. But I had my eyes on the guitar because it was sexy—it was more contemporary. But my hands were too small, so I had to wait until I was about 15 for my hands to get big enough to play. And when they did, I was off to the races! I took lessons from a wonderful jazz guitar teacher, and he gave me enough information so that when I graduated from high school and went to the University of Washington in 1961, I was ready to try to get some gigs to help pay for my college."

EARLY INFLUENCES

"I initially listened to Barney Kessel, Chet Atkins, Chuck Berry, and Johnny Smith, but when I heard Wes Montgomery, all bets were off. Wes had brilliant ideas. It was the big thumb that really did it for everybody. We would just go into rapture when Wes would do the octaves. We couldn't fathom how he could do it. Wes played a jazz club in downtown Seattle around 1963 with the Montgomery Brothers, and I wasn't 21 yet, so somebody lent

me their ID. I got in, and I think the first tune they played was a Latin thing called 'Black Orchid.' Then they did 'Green Dolphin Street,' and I don't remember anything after that, because I was so blown away. This was my first time seeing a consummate jazz performance by a genius."

NEW YORK

"I dropped out of school by the end of 1964, and I went to the 'University of the Streets of New York City.' I heard [saxophonist] Charles Lloyd the first night I was in New York, and I had no idea what his band was playing. There was nothing in my record collection like it—and nothing I had heard on the radio, or at someone's house, or in a jam session. In New York, it was all about cutting edge, and I said, 'I think I'm going to stay here.'

"When I first got to New York, though, I was doing poverty gigs. We couldn't even afford a bass player. It was just vibes, drums, and me at the Crossways Idlewild Inn near the airport in New York [JFK airport was originally called Idlewild]. But, because there was no bass player, I had the freedom to play whatever I wanted, so I started playing Beatles lines in the middle of songs. It worked, and I knew it would. I wanted to start a movement where we could open up our musicality to all kinds of music, as long as the ideas we borrowed from pop music or other forms were good ideas. And the Beatles were not just a band—they were a force. They were like Mother Teresa, because they transcended everything."

CHANGE IS GONNA COME...

"At that time in the early 1960s, New York City was a huge melting pot for musicians and new ideas. We all wanted to do



FEATURES >>> LARRY CORYELL

innovative stuff, but we didn't want to get away from jazz as much as augment it every once in a while. But the great thing about New York in '65 is that the quality of rock and roll playing went way up. So when I added rock to jazz, it was very organic."

JOHN McLAUGHLIN

"I would teach John something that I knew, and he would come back and teach me a raga. The rules were that you could only play notes in the scale, and if I went out of the scale, John would say, 'Stop! It's not in the scale.' It took me a while to get comfortable with it, but I liked the discipline of Indian music. I could play it, but not as well as John, and we jammed with a lot of Indian musicians. It's a great body of music they have, and what we have in common with Indian musicians is improvisation.

"It was so funny when John was playing with Miles Davis. An interviewer for Rolling Stone magazine—and I'm not going to criticize the journalist—said that John was a rock and roller. But Miles said John was no more a rock musician than he was. Miles, man, he got the word. He saw that he wanted to change and go into another direction where he could open up, and he became a huge star because of that."

JIMI HENDRIX

"Jimi's tunes were deep. I miss him. We were close. We were both from Seattle, although we never met each other back home. But I would make suggestions before he would go into the studio [in New York], and he often took them. We would jam. It was nothing to speak of, really. We'd play blues. Jimi would play a right-handed bass left handed, and everybody was stoned."

ELECTRIC BASS & THE SEEDS OF THE ELEVENTH HOUSE

"At the end of the '60s, we realized that

it wouldn't hurt to bring in electric bass, but it had to be the kind of player who was sensitive to the jazz sensibility. Also, right around the time I got to New York, the electric bass was getting a really good sound—almost like an organ. The original bass player in the Eleventh House was a guy named Danny Trifan. We also had Alphonse Mouzon on drums, Mike Mandel on keyboards, and the great Randy Brecker on trumpet."

ON EVOLVING

"I enjoy orchestrating very much. I've written a lot of classical stuff—operas and symphonies. In fact, I've written some duets with piano and guitar that are unplayable. I can't play the guitar part yet. You see, I believe we should go beyond our capacity in order to increase our capacity. Preferably, however, we do this in the privacy of our own homes, so the cacophony is not distributed among the unbelieving masses."







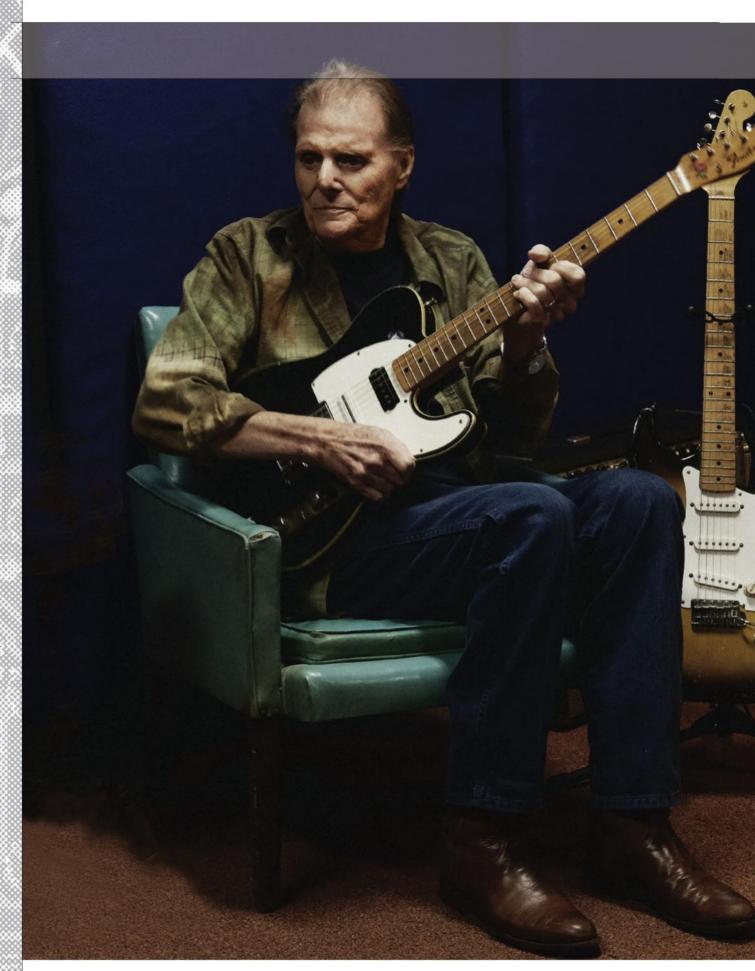
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Captain Hook

SESSION LEGEND REGGIE YOUNG STEPS INTO THE SPOTLIGHT AT LAST

BY MICHAEL ROSS

LISTENING TO REGGIE YOUNG'S RECORD.

Forever Young [Whaling City Sounds], you could be forgiven for thinking, "I've heard some of these licks a million times." If you have, it's because Young invented most of them, and he employed them to color more than 100 Top 40 hits. For example, the funky intro to Dusty Springfield's "Son of a Preacher Man," the harmonized whole-tone hook of Billy Swan's "I Can Help," the acoustic intro to Elvis' "In the Ghetto," and the guitar bonanza that is

Dobie Gray's hit "Drift Away" are all the product of Young's fertile musical imagination. Your familiarity is no doubt enhanced by two subsequent generations of players "borrowing" liberally from his lick lexicon

Young's professional life began in the '50s, playing rockabilly with Eddie Bond & the Stompers. In 1955,

he cut the hit instrumental, "Smokie Part 2" with the Bill Black Combo, which led to a package tour with the Beatles. As part of the "Memphis Boys" at Chips Moman's American Studios, the guitarist added memorable hooks to hits by Presley, Aretha Franklin, Neil Diamond, and the Box Tops (the electric sitar on "Cry Like a Baby"). Since the '70s, Young has continued his creative run on Nashville recordings with Merle Haggard, Waylon Jennings, George Strait, and others.

Now, after a half-century career, the man

behind the curtain has finally stepped out front. Young, 80, endured major heart surgery a couple of years ago, and the guitarist is undergoing physical rehab in order to promote *Forever Young* onstage. Happily, the record—mixed by Nashville recording ace Robby Turner—features a handful of instrumentals that bring into sharp focus the touch, taste, timing, and tone that have made him a hero to those of us who research album credits.



How did you start playing the sliding fourths and sixths that are such a part of your style?

It was working with Bobby Womack back in Memphis. We'd sit and watch each other, and I picked up a lot of that from him. Don Was said I did it before he did, but I don't know. Bobby started playing my old style with the thirds, and I started

playing his style because I loved his playing.

He was sliding the fourths and you were sliding the thirds?

Yeah [*laughs*]. On the Wilson Pickett record "I'm in Love," I was playing the high part, and he was playing the low part.

When did you start this record?

About four years ago, down at Mac McAnally's studio in Muscle Shoals. I like it there, because it is a great-sounding room and has a Neve console. I went down with some people from Nashville, and I used David Hood, a

FEATURES >>> REGGIE YOUNG

bass player down there. You don't have to tell these players what to do—that's why I used them. But trying to produce and play at the same time didn't work for me. When I played the tracks at home, I hated my guitar parts. So I put it in the closet for a couple of years, and one day I said, "I'm going to get that out, see what it sounds like, and whether it can be fixed." The rest of the band sounded great, but I redid all the guitar parts.

What didn't like about your guitar?

I didn't like the leakage in the guitar mic. It also sounded like I wasn't relaxed when I was playing, and that I wasn't part of the band.

Do you think that was because you were trying to produce and play at the same time?

Yeah. I got an engineer, and we recut all of my parts here at the house. I had my '65 Fender Deluxe Reverb in the other room.

What did you mic it with?

I used this old Shure SM57 [Pulls out

a Shure SM57 housed in an athletic sock. The mic has "old" written on it].

I guess that's how you know it is the "old" one.

The engineer mixed in a Cascade Knuck-lehead ribbon mic. It's a cheap mic, but it sounds great on guitar, and he blended the two mics well. And then, Robby Turner's mix brought it up another notch. Mine is just a regular Pro Tools system, and he has that HD system. It took on another life when he started mixing.

Can you talk about your main session Tele?

I think it's a '69. There's no serial number on it. I put a Joe Glaser B-Bender on the back where the serial number was.

What is the middle pickup?

It's a Seymour Duncan. The bridge pickup is a Ron Ellis, and the neck is a Bill Lawrence Strat pickup. I don't think I used any of the back pickup on the record.

On "It's About Time," the sound is a

little different. Was that the same guitar?

It's the same guitar. The only different one was "Exit 209." That's a '57 Strat.

Do you remember getting that Strat?

I bought it shortly after I moved here in '72. A friend had two or three, and let me pick out whichever one I wanted. I was like, "Whoa! Okay."

It probably was still affordable in '72. Yeah. They're ridiculous now.

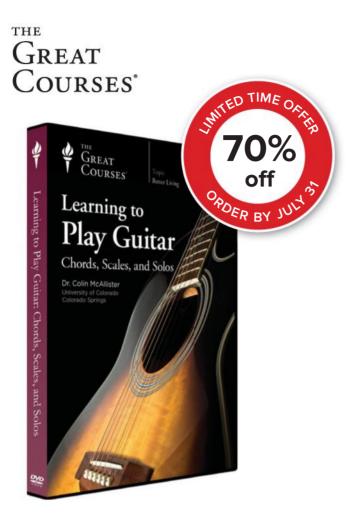
Are there Bill Lawrence pickups in that as well?

They are all Bill Lawrence, and they don't make any noise. I had EMGs in it for a long time, because those are very quiet, as well. I've had every pickup ever made in that guitar.

What strings are you using?

I've used a D'Addario .0095 set for years and years, and that's the set I used to cut this record. But, since the operation, I don't have the same strength in my hands, so I went to a lighter .009 set.





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Were you planning on having horns when you first cut the original tracks?

No. After I got my guitar parts on it, I thought, "It needs something else." I decided on horns, and I thought of Jim Horn, who wrote some parts and did a wonderful job. We had some Muscle Shoals players, another player from here, and Jim. We did the horns in my bedroom.

"It's About Time" reminds me of one of those great Mike Post TV themes, like the Rockford Files. Were you thinking in those terms when you wrote it?

No. I had actually written another melody over that song, and that was one of the things I didn't like about the original guitar tracks, so I rewrote it. I just used the same chords and rewrote the melody.

Did you use any pedals when you were recording the record?

I used this board here. [A Mark Kendrick overdrive—given to Young by Merle Haggard-Whirlwind compressor, Boss

EQ, Boss TU-2 tuner, Boss DD-6 Digital Delay, Voodoo Lab Sparkle Drive, TC Electronic Chorus, and Voodoo Lab Tremolol.

Were you using the equalizer?

Yeah. I set up my amp and guitar, get them sounding as good as I can, and then I kick in the EQ to add a little low end and fatten the sound.

The arpeggio you play in the head of "Memphis Grease" sounds very different than the notes before it and after it. Did you double it or is there a chorus on it?

I doubled all the melody lines, and sometimes Robby mixed in the doubled tracks.

Are you going get out and play to promote the record?

That's what I'm trying to do now. After the surgery, I couldn't play and I had kind of lost the desire to play. Then, when I wanted to play, I couldn't play what I used to. It's slowly coming back, but there are still a lot of intricate things I used to play that I get to and have to stop. I have

a guitar teacher coming over for therapy who is teaching me a lot of finger exercises. It's just notes and coordination with your fingers and your pick. I have to say, it's pretty boring.

Still, it's great you're getting back in shape.

We worked up about an hour-and-ahalf show—including the new album, plus some old tunes we cut in Memphis and here in Nashville. I'm going to have to try to remember what I played on them.

Why did it take so long to record your first solo record?

I was busy. When I had some time off, the last thing I wanted to do was record more. But, to make sure I was in tune when we started a session, I used to play some things that were like what I did on this album. People would say, "What is that?" I'd say, "I don't know. I'm just tuning up." They said, "You ought to record some of that." Eventually, I did.



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DWNING YOUR TONE MEANS

simply that: Your sound defines who you are as a guitar player. So simple, but why are some players able to achieve a definitive and instantly recognizable sound—think Carlos Santana, SRV, Billy Gibbons, Jeff Beck, Jerry Garcia, Jimmy Page, Eric Johnson, and Wes Montgomery to name a few—while others remain harder for the listener to name-check within a few notes?

Is it as fundamental as knowing what *you* want to sound like and choosing the right tools to achieve it? Is it about cloistering yourself like a monk and practicing 12 hours a day? Is it about what you grew up listening to and how it was assimilated into your personal playing?

Yes, it's all those things and much more, because everyone develops differently as a player and chooses a musical path to follow based on what they know they can do and the opportunities that are presented to them. The goal, of course, is to make great music, love your life as a guitarist, and hopefully turn your passion for playing into a successful venture.

What follows here is a discussion about what it takes to own your sound. From the physical and mental elements that shape your identity as a player to understanding how amps, pickups, and effects impact the total equation and ultimately lead to creating a sonic signature that's yours to keep. —ART THOMPSON

COVER STORY

OWN YOUR TONE



THE MYSTERIES OF HANDS AND FINGERS,

OR WHY DO WE NEED GEAR IF WE ALWAYS SOUND LIKE OURSELVES?

BY MATT BLACKETT

ONE OF BRIAN MAY'S MOST FAMOUS

solos, the lead to "Crazy Little Thing Called Love," was cut with a Fender Esquire into a Mesa/Boogie amp. And yet, upon hearing it, people still say, "You can recognize that guy's sound anywhere, after just one note." How is that possible? Why does Eddie Van Halen sound exactly like Eddie Van Halen no matter which of his many rigs he plugs into? Why is the same thing true about Bonnie, B.B., Stevie Ray, and Jimi? It's obviously *not* the gear, so what is it? Is it the note choices, the phrasing, the attack, the bends, the vibrato?

Yes, it is ...

As we've said, all of those things—and there are certainly other factors—make up not just the style but the *sound* of those great players. It's their fingerprint and their identity, and that doesn't change appreciably if they employ different equipment to do their thing, because their thing is their thing.

So where does that leave the rest of us, who might not possess such singular talent, chops, and vision? In precisely the same place. We all will sound exactly like ourselves regardless of our guitars, amps, or effects. We don't *need* a new guitar. We need to take a lesson, write a tune, catch a show, get in nature, or find inspiration

from a beautiful work of art.

That brings us to a fascinating conundrum: It's not about the gear, and the gear can't make up for what we lack as players, but we *love* the gear! New guitars are exciting. New effects are inspiring. New amps are a blast. Even a new set of strings can brighten your day. It's not fair to say that none of that matters, so instead let's just say this: It matters and it doesn't, and, to make sense out of that, we'll look at the question from a few different angles.

FORGET ABOUT THE GEAR

Two famous tonemeisters, Tom Morello and Brian May, forged their unique sounds by intentionally limiting their gear choices. May did it when he plugged his homemade guitar into a treble booster and a Vox AC30. Bam! That was the sound he had heard in his head and once he could produce it, he had no need and no desire to change it (save for mixing things up occasionally with some outboard effects). I once asked Dr. May if it was at all fun for him to experiment with, say, a Les Paul into a Fender amp, just to see how that might move him. He was quick to say no. "That's not my voice," he explained, "and it feels very strange to speak in a voice

that's not my own."

Tom Morello credits his tonal epiphany to "giving up." He broke it down in his December 2005 GP story. "For years, I tried to find this perfect tone I had in my head. Then, one day, I spent a few hours fiddling with my gear, and I decided that I didn't particularly love the tone, but it wasn't going to get any better. So I marked those settings and said, 'Now I'm done. This is my sound.' And those settings are the same ones that I used in today's rehearsal—as well as on every record and every show I've ever played. When I stopped worrying so much about tone and started worrying about music, the problem went away."

Two great players who have relied on pretty much the exact same signal chain their entire careers. And even though those signal chains are more involved than "guitar-cord-amp," they're actually fairly simple. And yet both of them have a seemingly infinite array of sounds at their disposal, and both are instantly recognizable. Let's dig a little deeper into that.

Many years ago, a wise friend said to me, "You should play for a solid month with nothing but a Tele into a Twin Reverb. You'll be amazed at what that will do for your playing." I rejected the premise immediately. I loved my hum-sing-sing super Strat and my effects rack and my stereo amp rig. But it got me thinking to when I first started when all I had was a one-pickup SG copy and a Fender Champ. If I wanted different sounds back then, I couldn't hit a stompbox, call up a preset, switch channels, or even switch pickups. I had no choice but to use every little thing at my disposal. I rolled off the Tone knob to approximate the woofy distortion on my favorite records. I hit my strings with a pencil or a penny to vary the sound. I picked behind the nut. I discovered that if I placed the headstock on my amp, it would feedback and sustain in a way that belied the squeakyclean tone (and sounded surprisingly like the intro to "I Feel Fine"). I explored and I uncovered because I had no choice. The less gear I had, the more creative my hands and brain had to be ... and all of those tricks have been part of my trip ever since.

We can all do this, and we all should. Take any guitar, any amp, and maybe a pedal or two, and that's it. Then just start playing, and don't stop. Keep going even if it sounds boring or one-dimensional, because it's neither of those things. Once you get past that, you'll start to hear how much of your tone and your soul is in your hands, and you'll start to investigate further to reveal your unique voice. Maybe you'll turn the amp up so loud you have no choice but to roll your volume back (that's the counterclockwise direction most of us never use). You might crank the Treble and cut the Bass on the amp and then turn your guitar's Tone knob down (which is a Jeff Beck trick, by the way). What you'll truly be doing, though, is getting your sound, no matter what the equipment is giving you. Because deep down, we all know what we want to hear, and we all instinctively adjust our attack and approach to pull our tone out of any rig.

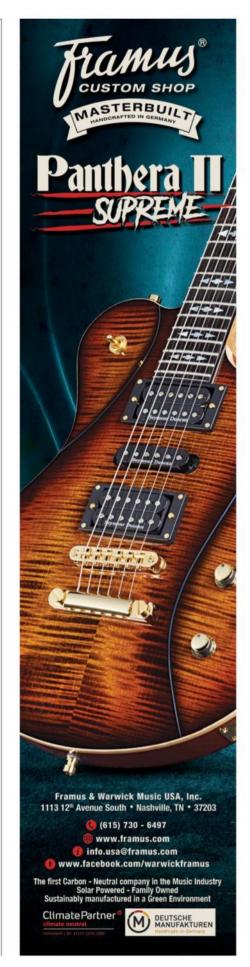
That's ultimately what we're talking about here: sounding like ourselves. Making our voice heard. When we feel like we have no distinctive voice, it's only natural to blame the tools, but that's wrongheaded. Simplifying the gear and really digging in and getting back to basics will remind you of what you sound like: your style, your identity. And it will prove to you that you can do it with any rig. That realization (or reminder) should boost your confidence and make you feel refreshed and enthused. Which is a perfect time to...

GET SOME NEW GEAR

We've already established that you don't need another piece of equipment to sound like yourself. But "need" is a very strong word. You certainly want some new toys, and there's nothing wrong with that. With your renewed sense of tonal self-awareness, getting a cool new guitar, amp, effect, or accessory will be super fun and make you feel like a kid again. Pedals and pickups are relatively inexpensive and can instantly provide a kick in the butt, especially if you get something out of your same-old same-old. Maybe you've never really explored delay effects. Hearing your signature licks bouncing back at you can be a real mindblower. If you've always been a Strat cat single-coil user, exploring a high-output humbucker, a gold foil pickup, or a P90 will let you sound like you, but with more punch, jangle, or clang. If one of your favorite stompboxes has an expression pedal input, get a damn expression pedal and plug it in! It won't take much for you to hear your tone in a new way. All this holds true for bigger ticket items like guitars and amps. Once again, this isn't using gear as a crutch—it's about finding inspiring tools to do your unique thing with.

And speaking of your unique thing, it's crucial to constantly expand it. That could mean tackling a new style, but it absolutely doesn't have to. I'm talking about things as simple as picking at different points along the string. Picking 12 frets above where you're playing will give you a big, bell-like sound; picking near the bridge will produce a skinny, tinkly tone. (Eric Johnson, anyone?) Drop the pick altogether and play your favorite licks with your thumb, or by snapping the strings against the fretboard. Bend with a different finger-it'll lend a new flavor to a go-to phrase. Slap a capo somewhere up the neck and work your shtick. Everything old is new again! All of these little tricks will force you to really play to your sound—and truly listen to what your hands are creating as they're creating it—rather than just relying on muscle memory, which is where feelings of being stuck in a rut or sounding generic often come from.

No matter what we do, we will always sound like ourselves. That's good news. Don't ever be afraid to sound like you, because that is something no one else can do. The goal of all of this is for you to sound exactly like you, only better.



COVER STORY

OWN YOUR TONE





TUBES AND YOUR TONE

BY DAVE HUNTER

DESPITE THE MANY ALTERNATIVES

available today, the majority of professional guitarists still achieve their lifeblood tone from amps that use vacuum tubes. There's just something magical about the way tubes do what they do, and how they make an electric guitar sound in the process.

In the early days of the instrument, from the 1930s through the '50s, tubes were the only viable tech available for amplifier manufacture, but they quickly proved they do much more than just making a guitar *louder*. In the process, they also add all kinds of depth, thickness, richness, and harmonics—a lot more sound, regardless of volume—all of which makes an electric guitar much more than just a higher-decibel representation of

itself. In short, they make a slab of wood and wire into an *instrument*, with all kinds of crazy expressive potential.

TOTAL HARMONIC DISTORTION

Much of the glory of tube tone occurs in the way these devices amplify your guitar signal, and the fact that they clip (distort) a little, and sometimes a lot, while doing so. As tubes clip (in ideal scenarios, at least), they do so gradually, so the resultant distortion sounds smooth and natural and dynamic, rather than hard and harsh and sudden. And when they clip, tubes also add harmonic overtones to the raw guitar signal, the result being a thicker, more lush sound than you'd get from the same guitar merely

amplified via a very clean, linear amplifier.

"Ah, but what about so-called 'clean' tones," you ask? Yep, even those benefit from a touch of tube distortion—it might not be heard as "distortion", but it's just enough to add character and texture to what might otherwise be a very dull, stark guitar sound (ever plugged your guitar into a high-powered solid-state PA amp?).

THE SPICE OF LIFE

The thing is, there are many different types of tubes out there, and each has its own sonic characteristics. How do you know which is right for you? That's where *GP's Tube Tone Guide* (below) comes in!

It's worth noting that a talented amp

| TUBE | AVG. OUTPUT (PAIR) | VOICING | FOUND IN | CHARACTERISTICS |
|-------|--|---------------------|---|---|
| 6L6GC | 45 watts fixed* 30 watts cathode** | Big American | Fender Twin, Super Reverb, Bassman, Soldano SLO | Clear and balanced, with firm lows and articulate highs; smooth and full when driven hard. |
| EL34 | 50-60 watts fixed* 35 watts cathode** | Big British | Marshall plexi and JCM800, Hiwatt, Matchless Clubman | Thick and slightly granular, with forward midrange, round lows, crispy highs; compressed and aggressive when driven. |
| 6V6GT | 22 watts fixed* 35 watts cathode** | Smaller American | Fender Princeton, Champ, Deluxe; Tone King Imperial | Smooth and rich, with soft-ish lows and highs and detailed midrange character; easily compressed when driven. |
| EL84 | 20 watts fixed* 15 watts cathode** | Smaller British | Vox AC15, AC30; Dr. Z MAZ 18, Carmen Ghia; Friedman Runt 20 | Sweet, shimmering, and articulate when clean; juicy and overtone-rich when pushed hard; lows are pleasing, but not big or firm. |
| KT66 | 50 watts fixed* 35 watts cathode** | Yank- meets-Brit | Marshall JTM45, Dr. Z Route 66, Budda Superdrive 45 | Bold, smooth, rich and detailed, with big low end and balanced mids/highs (similar to 6L6 but "bigger"). |
| 6550 | 60 watts fixed* 40 watts cathode** | Big and bold | '70s U.Simport Marshalls, Ampeg SVT, Alessandro Bloodhound | Big, punchy, and powerful sounding, with firm lows and good balance between mids and highs; good rock crunch when pushed. |

^{*} when used in a fixed-biased pair

^{**} when used in a cathode-biased pair

designer can achieve a wide range of sonic ends using just about any viable tube, depending on how he or she voices the circuit. But, while tubes don't have a "sound" in isolation, different types are known for characteristics that enhance the sonic qualities of several established guitar amp designs, so it's pretty easy to plug them into an equation that at least gives you an idea of what to expect.

PREAMP VS. OUTPUT

Output tubes (also known as power tubes) are the big bottles that increase signal strength to a high-wattage output that can, with help from an output transformer, drive a speaker. Preamp tubes are the smaller tubes in front of them that increase your guitar's raw signal to a strength that the output tubes can then further amplify.

Our tone chart features output tubes, because they're more easily quantifiable and more individually related to specific classic guitar amps. Different preamp tubes do enhance different sonic ends too, but roughly 95 percent of amps use the same preamp tube type—namely the 12AX7 (known in the U.K. as the ECC83) and its related equivalents—so there's less variation to talk about. Different *types* and *makes* of 12AX7s can sound subtly different, although the ways in which they do so are more difficult to quantify precisely in this context.

In addition to the 12AX7, the general sound of which most tube amp owners will already know, there are a few other preamp tubes appreciated for their diversity. Among the nine-pin types, the highgain EF86 (heard in amps like the vintage Vox AC15 and Matchless DC30) is beloved by many for its thick, full-throated sound. The 12AY7—a lower-gain tube than the 12AX7—is the legendary tube of tweed Fender amps of the mid to late '50s, while the 5751 (somewhere between 12AY7 and 12AX7 gain-wise) is sometimes used to achieve more headroom in a preamp stage.

Furthermore, there's a wide range of larger eight-pin (a.k.a. "octal") preamp tubes that were found in many early guitar amps and which some boutique makers still enjoy using today, but these are far less in circulation, so we won't try to detail them here.

Finally, note that you should *never* swap one tube type—preamp or output—for another without first ascertaining from the manufacturer that it is safe to do so.



HOW YOUR PICKUPS AFFECT TONE

BY DAVE HUNTER

PICKUPS ARE WHAT MAKE ELECTRIC

guitars *electric*, and they're responsible for a huge proportion of any guitar's sonic signature. But many guitarists choose an instrument with only scant regard to what its pickups can and can't do—only to find themselves bucking against it as they tweak, swap, and modify amplifiers, pedals, and all sorts of components in an effort to alter the fundamental core of their tone.

In simple terms, a guitar pickup is an electro-magnetic device that wraps a coil of very thin wire around a source of magnetism. When vibrating guitar strings disrupt the magnetic field above the pickup, a small electrical signal is induced within the coil, and that signal carries an "electric" approximation of your guitar's sound to the amplifier.

The thing is, these basic components—magnets, coiled wire, and some structure to hold it all together—can be put together in almost limitless different configurations and still work, but the ways that those configurations translate string vibration into sound can all be different, and sometimes dramatically so.

These things all affect a pickup's sound and performance:

COIL WIRE AND COIL SHAPE

The very thin wire used to form pickup coils ranges in thickness from fine 42-gauge to very fine 44-gauge (for reference, the average electrical lamp wire is 18-gauge), and is coated in a thin insulating layer to keep the wire from shorting out within the coil. The type of wire, type of insulation, the way the wire is wound into a coil, and the overall

shape and size of the coil all contribute to characteristics of any pickup's performance.

More wire (measured by reading the pickup's DC resistance, in ohms) means a hotter pickup, assuming the same magnetic strength and same overall design, but several other aspects of how the coil is wound also contribute greatly to its sound. A little irregularity in the winding pattern can sometimes add character, while the same amount of wire shaped into a tall, narrow coil or a wider, flatter coil will result in different sonic signatures—brighter and tighter in the former; smoother and warmer in the latter.

You can think of one aspect of the way coil shape and overall pickup structure influences tone like this: The wider the coil and the area that senses string movement, the warmer that pickup is likely to sound (all else being equal).

MAGNET TYPE AND STRUCTURE

In addition to the coil(s), all pickups need a source of magnetism to function. The strength of that magnet and the material it's made from play a big part in how the pickup translates your strings' movement into an electrical signal, and therefore how your guitar sounds.

Ceramic magnets tend to be stronger than Alnico magnets and therefore make a pickup "hotter," while Alnico is known for richness, and a gentle compression in some cases. (Be aware that a good pickup maker can make either type of magnet perform wonderful sonic tricks if he or she knows their craft, but these are the general characteristics to keep in mind.)

COVER STORY

OWN YOUR TONE

| PICKUP | COIL(S) & WIRE | MAGNET | POLES | STRUCTURE | SOUND & AVERAGE RESISTANCE |
|------------------------|-------------------------|--------------|--------------|-----------------------|--|
| STRAT | Tall/narrow, 42-AWG | Alnico poles | Alnico poles | Magnet within coil | Bright, clear, firm lows, articulate highs, semi-scooped midrange. $5.8k-6.5k\Omega$ |
| TELE (BRIDGE) | Tall/narrow-ish, 42-AWG | Alnico poles | Alnico poles | Magnet within coil | Clear and bright, with more girth and bite than Strat pickups. $6.2k-7.4k\Omega$ |
| JAZZMASTER | Wide, shallow 42-AWG | Alnico poles | Alnico poles | Magnet within coil | Warmer and smoother than Strat or Tele, but with good clarity. $6k-6.7k\Omega$ |
| P-90 | Wide, 42-AWG | Alnico bars | Steel poles | Magnet below coil | Decent clarity but with thick, meaty midrange and some grit. $7.4k-8.4\Omega$ |
| PAF-STYLE HUMBUCKER | Dual narrow, 42-AWG | Alnico bar | Steel poles | Magnet below coil | Warm, rich and punchy, with silky highs and decent clarity. $7.4k-8.4k\Omega$ |
| FILTER'TRON | Dual narrow, 43-AWG | Alnico bar | Steel poles | Magnet below coil | Great clarity and sparkle, tight lows, sweet highs. 3.5k – 4.5k Ω |
| DYNASONIC | Wide, 44-AWG | Alnico poles | Alnico poles | Magnet within coil | Bright, firm, punchy, with some snarl and bite when pushed. $8.5k-12k\Omega$ |
| TOASTERTOP | Semi-wide, 44-AWG | Alnico poles | Alnico poles | Magnet within coil | Clear, bright, with firm lows and good grunt when hit hard. $7k-10k\Omega$ |

IS THE MAGNET INSIDE THE COIL OR BENEATH IT?

Even when using the same ingredients, the constructional variable of putting the



magnet *within* the coil (either as a single bar, or cut into six individual polepieces) versus mounting it *beneath* the coil (in contact with steel polepiece of some kind that run up through the coil) results in different-sounding pickups.

The first—magnet within coil—will lean toward brighter, clearer, and more articulate; the second—magnet beneath coil, steel poles within—will lean toward thicker, meatier, and often a little grittier.

POLEPIECES AND OTHER METAL COMPONENTS

Any additional metal parts used in a pickup's construction can also influence its sound, by affecting and directing the magnetic field, or by influencing other aspects of its electromagnetic properties. The instances of these and the ways in which they occur are too detailed to mention here, but it's simply worth noting that the shape and construction of parts like base plates, covers, polepieces, spacers, threaded "keeper" bars and other components can all play a part in shaping your tone, however minor that may be.

SINGLE-COIL OR HUMBUCKER?

As described, a single-coil pickup has just one of 'em, and can hum as a result. Humbuckers join two reverse-polarity/reverse-wound coils together, resulting in the cancellation of 60-cycle hum, and some sonic differences besides.





COVER STORY

OWN YOUR TONE



WHAT AMP IS BEST FOR YOU?

BY ART THOMPSON



WHEN CONSIDERING WHAT KIND OF

amplifier you'll need to make that righteous new guitar sing, the choices are overwhelming. You can spend \$2,000 or more on a hand-wired boutique 1x12 combo that has one channel and cranks out 20 watts, or less than half that on a "production" 50-watt tube combo with footswitchable channels, spring reverb, and an effects loop. You might go the digital route, and get a 120-watt 1x12 combo that features tube modeling, extensive effects, and comes in at under \$400. How about a solid-state combo with 100 watts and a bevy of digitally rendered effects for less than \$350?

Gee, what a surprise that there are tons of affordable options out there for those who want maximum bang for the buck. But even though the low-price category is dominated by solid-state and digital designs, the term "digital" and "low cost" aren't necessarily one and the same.

In fact, if cost is *not* a concern, there are the high-end digital modelers from Fractal and Kemper that perform so well that they have become the main rigs for many pro guitarists who tour with top-level bands. Fractal and Kemper are very different animals, but if superb sound and the flexibility afforded by having all that digital power

under the hood is attractive to you, then you might want to join the crowd of players who have found that these modelers rival the best tube-powered amps, and can even replicate the sounds of any amp/speaker combination; so you can leave your prized vintage tube heads and combos at home, yet still dig their sounds onstage.

VINTAGE OR REISSUE?

So have we reached the point where tubes are essentially obsolete? Of course not, because, as with many things, there are other reasons why people love tubes above all else, and why such ancient technology is destined to be around for a long time to come. For starters, James Burton, Jimi Hendrix, Jeff Beck, Eric Clapton, Jimmy Page, Mike Bloomfield, and many other great players and innovators made history by plugging into amplifiers powered by the technology of the day—i.e. vacuum tubes—and that emotional connection we guitarists have to the past is something that just can't be modeled.

Many of the amplifiers these guys used back in the '50s, '60s, and '70s remain in production in reissue form. Some builders have gone even further to bring the past back to life. Witness Steven Fryette's revival this year of Sound City amplifiers and introduction of the Master 100 and other updated models, whose circuit DNA is rooted in this mysterious British marque from the 1960s. There's also Supro's 1695T Black Magick which replicates the amp Jimmy Page used on so many led Zeppelin tracks—and Mesa/ Boogie's King Snake combo from a couple of years ago, which revived the revolutionary Mark I amp of 1971 that Carlos Santana made so famous.

Speaking of old-school amps, there are plenty of models from the '50s, '60s, and, '70s that are available at prices that remain well below that of guitars from the same eras. If you're thinking of buying a vintage amp, one of the first things to consider is how well it has been maintained. Many components in an amp are prone to wear, and the cost of having a technician replace resistors, caps, potentiometers, tube sockets, etc., can really add up. If you know how to safely trouble-shoot and repair high-voltage tube circuits, maybe it's not even an issue.

Do vintage amps sound better than the equivalent models made today? Many tone

hounds say yes, but the differences between, say, original and reissue Marshall JTM-45s when cranked up on stage may be hard to discern; while in the studio or other critical listening environments it might be very noticeable. If you can afford an old Marshall or tweed/blackface Fender in good working order, certainly consider adding one to your collection. Even though the original tubes, filter caps, and other components have likely been replaced, if the transformers are original (and they probably are) you can be in for a real treat. A vintage output tranny in particular can give the oldie more richness and complexity. A well broken-in speaker can be the final smoothing touch, however, as with any electro-mechanical device, speakers are only good for so long, and eventually will need to be replaced or rebuilt.

Another nod to going vintage it that it's just so cool to look at wiring that was soldered in place by someone decades ago, who may have had Leo Fender or George Fullerton, or—on the British side—Jim Marshall, Ken Bran, or Steve Grindrod looking over their shoulder. Check out an old Hiwatt that was wired by Harry Joyce—simply incredible workmanship! Many of today's boutique builders offer similar masterpiece circuit detail, which explains the lofty cost of some of these builds.

Steering out of vintage land, a reissue amplifier makes a lot of sense if you plan on doing a lot of gigging with it. In that context, does it even matter that a Fender '65 Deluxe Reverb reissue looks completely different on the inside than a real one from 1965? And fear not, if you decide later that hand-wiring is the only way to go, consider a conversion: Boutique amp builder George Alessandro offers a service to convert certain reissue Fender amps to hand-wired circuitry. See the details at alessandro-products.com.

No matter which way you end up going, however, there's no doubt we live in a fantastic time with all the amplifier choices that abound. From multi-channel tube models that go from clean to scream (and all points in between) at the press of a button to beautifully rendered boutique amps that blend aspects of the best classic American and British amps to the cutting-edge modelers that have cracked the codes to the riches of tubes, we live in an era of having it all, and that's a mighty sweet thing.



COVER STORY

OWN YOUR TONE







A SIMPLE REFERENCE GUIDE TO GUITAR EFFECTS



WHEN I BEGAN PLAYING GUITAR, ONE

or two types of distortion pedals, a phaser, and maybe a wah pedal were all that were available to modify the basic sound of my guitar and amp. If I was lucky the amp might have reverb and tremolo options. Today's fledgling guitarist is faced with a galaxy of pedal possibilities: at last count over a hundred overdrive options alone—and

BY MICHAEL ROSS

that doesn't count distortions and fuzzes. This wealth of sonic modifiers can prove daunting.

The good news is that some basic information and principles are still all you need to start adding effects to your guitar sound. The best place to begin is by understanding the three main effect groups: Gain, Modulation, and Ambience.

GAIN

Gain pedals affect the level and distortion of the guitar signal, differing largely in the amount and texture of the grit.

A *boost* pedal increases only the level of the signal put out by your instrument. Boosting the signal a little can make up for sparkle lost when using long connecting cables and

Continues on page 111



THE

MONUMENT

HARMONIC TAP TREMOLO

The Monument offers a unique harmonic mode that hearken back to the old Fender Brownface amps. A low-pass and high-pass version of your guitar signal are modulated opposite of each other, or 180° out of phase (high and low frequencies rise and fall opposite of each other). The result is a warm, almost "chewy" tremolo.

Learn more at walrusaudio.com



STANDARD (STD) MODE



High and low frequency rise and fall together causing full frequency volume modulation.

HARMONIC (HAR) MODE



High and low frequencies modulate opposite each other so there is no perceivable complete volume







LESSONS

Extra-Terrestrial Tourism A 20th-Anniversary Tribute to the Inventive, Otherworldly Guitar Work on Radiohead's OK Computer

BY VINNIE DEMASI

WHEN RADIOHEAD FIRST MADE WAVES

with its 1993 debut single, "Creep," a song built around a repeating four-chord vamp featuring self-loathing lyrics, noisy guitars, and dramatic dynamic and textural contrasts between its sections, there was little to distinguish the band from other post-grunge ensembles of the day. The Oxfordshire, England, quintet, however, took a sonic quantum leap forward on their follow-up recording, *The Bends*, with

its atmospheric soundscapes, lush layered guitars, crafty song arrangements, and literary inspired lyrical themes. And by the time the band released its 1997 masterpiece, *OK Computer*, it was clear that Radiohead had broken free of the pack and would become one of rock's pace-setters at the dawn of the new millennium.

Like the Beatles' Sgt. Pepper's Lonely Hearts Club Band and Pink Floyd's Dark Side of the Moon, OK Computer became a benchmark of aural achievement for its era. The band had perfected a three-guitar formula that saw Jonny Greenwood delivering jagged, Fripp-inspired lines, lead singer Thom Yorke providing acoustic anti-folk rhythm slashes, and Ed O'Brien layering chimey atmospheric arpeggios. Despite a futuristic concept and impression, the varied and nuanced guitar tones on *OK Computer* relied heavily on old-school analog equipment: Vox and Fender amps, various MXR

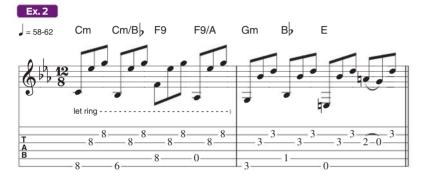
Ex. la



Ex. 1b

"Airbag" countermelody





and Electro-Harmonix phase shifters and envelope filters, and vintage Roland RE-201 Space Echo units. Texturally, OK Computer was influenced by the early jazz-fusion of Miles Davis and the film soundtrack recordings of Ennio Morricone, and it also borrowed heavily from prog-rock by incorporating multi-part suite forms, odd meters,

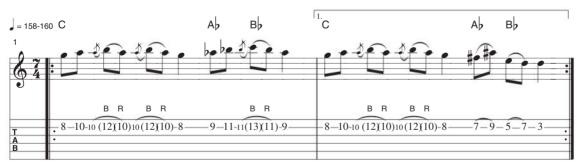
and jarring polyrhythms. To celebrate the 20th anniversary of this milestone opus and creative achievement, let's examine some of its most inspired moments.

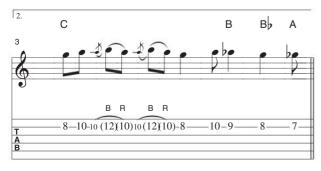
Ex. 1a demonstrates Greenwood's modally mixed, low E-string riff to "Airbag," the album's insurgent lead-off track. In live performances of the song, Greenwood is usually seen aggressively attacking his Lace Sensor-loaded Telecaster Plus with slashing upstrokes, muting the adjacent unused strings with his fret hand. On the riff's repeat, be sure to the substitute the octave-higher F note at the 13th fret, as indicated. Starting in bar 4 of the main theme, O'Brien chimes in with Ex. 1b, a repeating, hypnotic counter-melody phrase, performed on a Rickenbacker 12-string. If you only have a 6-string handy, you can mimic the octave-doubling effect by using an octave pedal such as an Electro-Harmonix POG, or by just playing the higher-octave voice using strummed octaves.

Arguably the album's most ambitious track, "Paranoid Android" is a six-and-halfminute masterpiece that careens through various moods, textures, tempos, meters, and tonal centers. Ex. 2 is based on Yorke's acoustic progression that underpins the

Ex. 3

"Paranoid Android" melodic phrase





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Paranoid Android

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LESSONS >>> RADIOHEAD

song's opening verses. To match the original, simply straighten out the meter to a moderately paced 4/4 and give each chord two beats. The song's second section makes clever use of a *C-Ab-Bb* progression played over a disjointed rhythmic figure in 7/4 meter and builds to a climax during Greenwood's dissonant yet melodically crafty solo, the last phrase of which is transcribed in **Ex. 3**. Dig in and play it with plenty of attitude.

One of *OK Computer*'s most inventive musical moments can be found at the beginning of "Let Down." While the band delivers a stock *A major* I-V-VIm-V progression (*A-D-F#m-E*) in 4/4 time, Greenwood arpeggiates **Ex.** 4's *Amaj7*(11) figure in 5/4. This polyrhythmic juxtaposition creates a jarring and oddly compelling counterpoint that translates the album's lyrical themes of alienation and disconnection into concrete

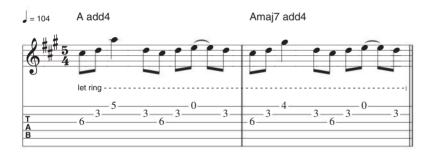
musical expression.

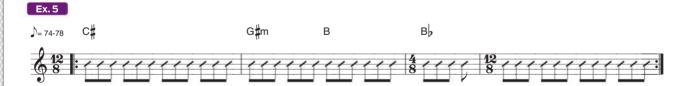
The use of rhythm to represent and convey estrangement is further exemplified on the album's closing track, "The Tourist." An otherwise lilting and majestic 12/8 groove is interrupted by a bar of 4/8, and resolved with a chromatically descending major chord not unlike that in Ex. 5. To cop the vibe of the original part, lower the entire progression by a whole step (*B-F#m-A-A*_b), articulate each chord with sparsely-voiced arpeggios, and append the *B* and *F#m* voicings with Fig. 1a's Badd4 and Fig. 1b's thumb-fretted *F#m7add4*, respectively.

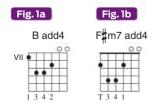
By offering a bold and inventive new approach to alternative rock that still sounds relevant and appealing today, *OK Computer* continues to captivate and inspire two decades after its release.

Ex. 4

"Let Down" opening melodic figure







THE NEW TRADITION

Katana—the traditional sword carried by the historic samurai of Japan—is a symbol of honor, precision, and artistry in Japanese culture. Adopting the majestic sword's name with pride, the Katana series is a new lineup of class–defying guitar amplifiers with refined rock tones and built-in BOSS effects. Katana amps are the perfectly tuned embodiment of craft and feel, wielding a sonic ability to elegantly cut through any band, stage, or dreary afternoon. Featuring proprietary circuit designs and meticulous tuning, the Katana series combines traditional craftsmanship and breakthrough functions to produce true next-generation rock amplifiers.

KATANA AMPS



LESSONS

>>> STYLE LESSON

Hitting the Mark How to Use Target Tones to Craft Sweet Blues Licks

BY JESSE GRESS

IN THE BLUES UNIVERSE, A TARGET

tone, as its name implies, is a melodic destination point that harmonically coincides with a particular chord within a standard 12-bar progression and typically falls on a strong downbeat. In other words, it's a note that belongs to the I, IV, or V chord (all dominant sevens), but it may also be a non-chord tone that pleasingly embellishes the chord of the moment. This lesson offers some effective melody making approaches and tactics that can help you become a consistent sharp shooter when it comes to crafting blues solos.

For demonstration purposes, let's use the key of *A*, in which we find the following target tones for each chord in a 12-bar blues progression. (Notice that some of the notes are common to more than one chord.)

- *A7* (I): *A* (root/1), *C#* (3), *E* (5), *G* (\$7), plus *C* (\$3/#9)
 - D7 (IV): D (root/1), F# (3), A (5), C

 $(\ 7)$, plus G(4/11)

• E7 (V): E (root/1), G# (3), B (5), D (\$\dagger\$7), plus G (\$\dagger\$3/#9)

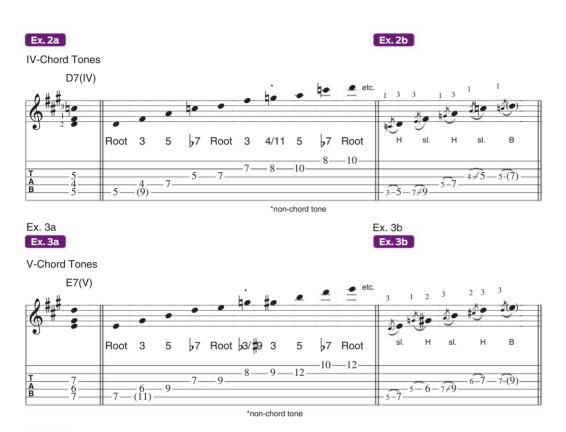
Why is hitting the target tone so important? Because a target tone, which may be preceded by as many notes as you like, locks you into a chord harmonically and creates the illusion of chordal accompaniment during your solos, which is a good thing, especially if there's no other chord instrument playing behind you. When you hit a strong chord tone on the downbeat of a chord change, you can actually define that chord's quality with a single note, regardless of what notes came before it (a key concept in jazz). However, not all chord tones carry the same weight—some produce finer definition than others.

So what are the juiciest chord tones for target practice? The 3 and \$7, which when combined form a tritone interval (the distance of three whole tones), virtually define

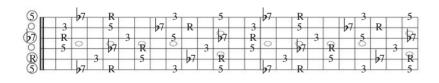
the dominant seven quality of each chord but tend to work best with the I and IV chords. (Tip: The 3 of the V chord must be used judiciously in order to maintain a bluesy vibe.) The root also works well with any chord, leaving the 5 as the least effective target tone, at least when it comes to defining the chord's quality. Some extensions also provide strong targets, with the $\frac{1}{3}$ / $\frac{4}{7}$ 9 carrying a bit more weight than the $\frac{4}{11}$.

KNOW THY CHORD TONES

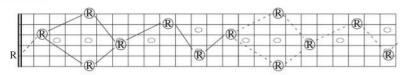
Ex. 1a presents a healthy assortment of *AT* (I) chord tones, plus a select non-chord tone (the \,\(\beta\)/\(\pm\)9) that also makes a good target, while Ex. 1b offers suggestions for how to embellish your targets with gracenote hammer-ons, slides, and bends. Examples 2a and 2b follow suit with *DT* (IV) chord tones and an added 4/11, and Examples 3a and 3b complete the picture with *ET* (V) chord tones, plus another \,\(\beta\)3/\(\pm\)9. Get to know them and where they live on



Ex. 4a



Ex. 4b



the fretboard within your favorite *A7*, *D7*, and *E7* chord shapes.

THE BIG DIPPER

Ex. 4a presents the big picture, by mapping out the dominant-seven chord tones in the key of *A* over the entire fretboard. You can locate all six occurrences of the same note within a 12-fret span by overlaying the "big dipper" note matrix diagrammed

for the *A* root note in **Ex. 4b** anywhere on the fingerboard. The dipper can be moved around like a constellation, and it will always retain its shape, and any part of it that disappears behind the nut automatically re-appears one octave higher, below the 12th fret. Similarly, any notes above the 12th fret automatically re-appear one octave lower above the nut. Use this template to single out every available *A7*, *D7*,

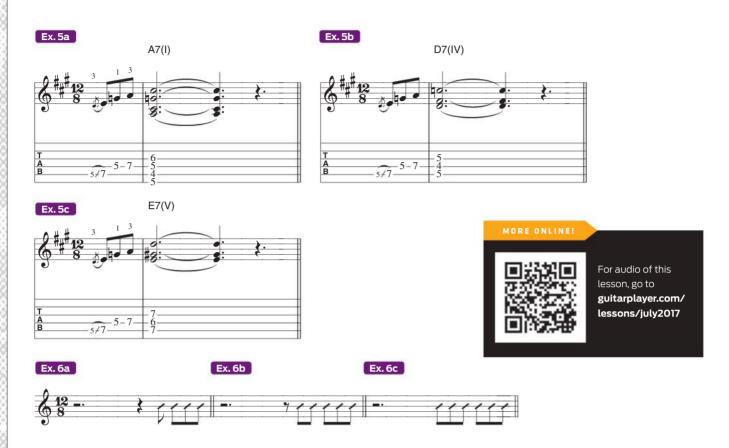
and E7 chord tone on the fretboard.

RHYTHMIC OPTIONS

We'll be demonstrating the target tones concept with three-, four-, five-, and six-note "pickup licks" (phrases started before the downbeat) derived from the A minor pentatonic, A major pentatonic, and A blues scales, many of which fall within the wellworn, fifth-position "blues box," applied to 12/8 meter, where a dotted-quarter-note (or three eighths) equals one beat, making them ideal for slow blues and medium and up-tempo shuffles. The initial idea is to use these pickup phrases to approach a target tone played on the downbeat (beat one) of any measure in a 12-bar blues progression. (Tip: Target tones can fall on any beat, but are best served up on strong downbeats, to lock in with the chord of the moment.)

The three-note pickup used in **Examples 5a-c** begins on beat four and approaches the I, IV, and V chords, respectively. Play the lick followed by the given chord voicing (or one of your own design), and then repeat, replacing the chord of the moment with any target tone that sounds good to

LESSONS >>> BLUES TARGET TONES



you. All of the following examples using four-, five-, and six-note pickup licks have been condensed into beat four, but keep in mind that you can also employ rhythmic displacement to extend them, by playing

eighth-notes exclusively, as demonstrated in **Examples 6a-c**. Additionally, all upcoming beat-four pickups are presented as "modules" (to conserve space) in 3/8 meter, with numerous rhythmic options, first in 3/8,

and then converted to 2/4 for use during faster tempos. Let's dig in.

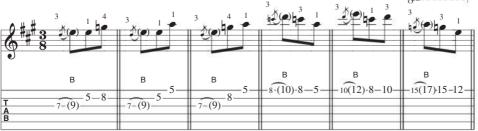
THREE-NOTE PICKUPS

The dozen three-note 3/8 modules presented

Ex. 7a

3-Note Pickup Licks for A7(I), D7(IV), or E7(V)





Ex.7b

3-Note Rhythmic Options



Ex. 7c



Ex. 8a

4-Note Pickup Licks for A7(I), D7(IV), or E7(V)



Ex.8b

4-Note Rhythmic Options





in **Ex. 7a** should be broken in as pickup licks placed on the last beat in any bar of a standard blues progression played in 12/8 meter. Begin each three-note lick on beat four to approach your chosen target tone on the downbeat, or beat one, of the following measure. The idea is to target Ex. 1a's A7 (I) chord tones on the downbeats of bars 1, 3, 4, 7, 8, and 11 (adding bar 2 during slow-change progressions), Ex. 2a's D7 (IV) chord tones on the downbeats of bars 5, 6, and 10 (adding bar 2 during quick-change progressions), and Ex. 3a's E7 (V) chord tones on the downbeats of bars 9 and 12.

Begin by targeting, as an exercise, each three-note lick with every applicable chord tone, then explore how each lick behaves in the context of each chord by playing it throughout an entire 12-bar progression. Experiment first by transposing the licks and target tones to different octaves (and eventually to all keys), and then by inserting pickup licks of your own design. Finally, adapt all of them to the 3/8 and 2/4 rhythmic options shown in **Examples 7b** and **7c**.

FOUR-NOTE PICKUPS

The same method may be applied to the

half dozen four-note pickup licks offered in **Ex. 8a**. These can be played either as written—two 16th notes and two eighths within a single beat—or using the rhythmic displacement from Ex. 6a and/or the 3/8 and 2/4 rhythmic options shown in **Examples 8b** and **8c**.

FIVE- AND SIX-NOTE PICKUPS

Not much narrative is needed from here on. Simply follow the same procedure as with the three- and four-note pickup licks to execute the five-note (four 16th notes followed by an eighth note) and six-note (six 16ths) pickups and their 3/8 and 2/4

LESSONS >>> BLUES TARGET TONES

rhythmic options illustrated in Examples 9a-c and 10a-c, respectively. And don't forget to try out the rhythmically displaced eighthnote groupings from Examples 6b and 6c.

All of the previous licks and rhythmic

options may be mixed and matched in endless combinations, or strung together to form longer lines that can be used after hitting the musical bull's-eye. You can find all of them and hundreds more, plus one- and two-bar lines, complete 12-bar solos, and a library of blues chord voicings packaged with an mp3 CD in my book *Blues Lick Factory: Building Great Blues Riffs* (Hal Leonard). Happy hunting!

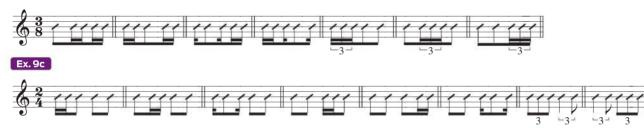
Ex. 9a

5-Note Pickup Licks for A7(I), D7(IV), or E7(V)



Ex. 9b

5-Note Rhythmic Options



Ex. 10a

6-Note Pickup Licks for A7(I), D7(IV), or E7(V)



Ex. 10b

6-Note Rhythmic Options



Ex. 10c



POPTRATS Pichie Fotzen

"The great thing about the RK5 Fly Rig is that I now have my ideal pedalboard with the effects I use most, which is reverb, delay and overdrive, in a tiny little box that fits in my guitar case. This pedal is very versatile, very convenient, extremely reliable, and built to perfection!" - Richie Kotzen

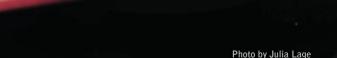
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LESSONS



"Open My Eyes" by Nazz

FEATURING TODD RUNDGREN

BY JESSE GRESS

HITTING THE AIRWAVES ONE YEAR

after *GP*'s 1967 debut, Nazz's "Open My Eyes" treated listeners to a scrumptious piece of psychedelic ear candy that opened many minds to the mad skills and multiple talents of Todd Rundgren. The eightbar intro to the opening cut from the band's self-titled debut album and first single release—the B-side was the soonto-be megahit "Hello It's Me"—displays early evidence of Rundgren's advanced harmonic sensibilities and showcases his searing fuzz-toned guitar riff.

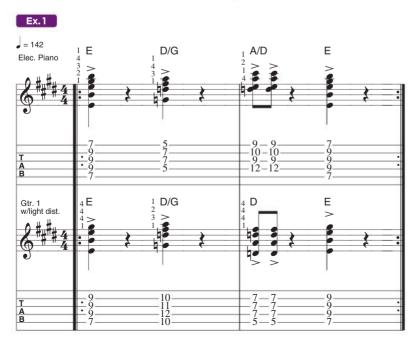
The four-bar prequel to the riff, which

features a tape-flanged Wurlitzer electric piano—one of the earliest recorded examples of this crazy-cool studio wizardry heard throughout the song—playing the four-chord figure depicted in Ex.1 in tandem with TR's semi-overdriven guitar chords. It's highly redolent of the Who's "I Can't Explain," but with a few twists. In addition to permuting their opening rhythmic motif, Todd enhanced Pete Townshend's pedestrian E-D-A-E progression with triad-over-different-bass-note chords (a.k.a. "slash chords") that imply third-less Gmaj9 and Dmaj9 sounds. (Tip: When we perform the

song live, I play the piano voicings minus the high *B* notes on both *E* chords, while TR plays the guitar voicings.)

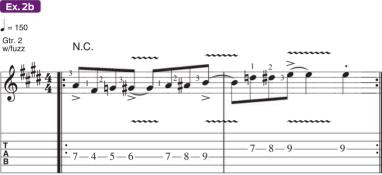
Todd's fuzzed-out main riff practically leaps out of the speakers, entering on the and of beat three with a "yee-haw!" slide up the high E string, which seems to peak at B, followed by two open low Es on beat four—spanning nearly the entire range of the instrument—before segueing to the ingenious riff notated in Ex. 2a. Here, we begin on open A and immediately drop to F# for a three-note chromatic climb to *G*#, the third of *E*. The chromaticism continues with A and A# preceding B (the fifth of *E*) before we jump to the open *D* string for a chromatic approach up to the tonic E. Brilliant! Play the first four bars as written, and then take it up an octave, as shown in Ex. 2b.

This month's deadline happened to coincide with Todd's Woodstock rehearsals in preparation for our upcoming 2017 Chivalrock tour supporting his latest album, *White Knight*, so I asked TR to fill us in on a few details about this month's Classic Riff, particularly how he got that impossible-to-reproduce tone: "I'm pretty sure I used a Gibson SG and a Fender Bassman,



Open My Eyes
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ADLER OF GUNS NOTOSES SONETTE OF DAVID LEE ROTH BAND

which was my rig with Woody's Truck Stop. I didn't use any pedals in those days. I never used an actual fuzz pedal or anything like that because I couldn't find one that sounded right to me. It's probably a combination of how it was miked and the engineer supersaturating it a bit [at the mixing desk]. I also had to teach the engineer how to do tape flanging, because I had accidentally figured out how to do it with two tape machines." Wow!

CELEBRATING ROCK CAMP'S

21ST ANNIVERSARY



RUDY SARZO (QUIET RIOT), CHIP Z'NUFF (ENUFF Z'NUFF).

TEDDY ANDREADIS (GUNS N' ROSES)

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LESSONS >>> CLASSIC



CONTEMPORARY GUITAR

Larry Coryell "Inside" Chords

CHORDS VOICED ON THE SIXTH, forurth, and third strings can be used for interesting voice-leading and bass lines. This month, let's look at a passage from "Unemployed Floyd" from my album Equipoise [Muse, FMC-5319], which is a good example of chords on these "inside" strings. "Floyd" is a blues, but with a different progression than, say, "First Things First," which we covered last month (they're both on the same LP). The chord symbols marked here occur in the middle

Larry Coryell helped pioneer fusion in the late '60s and has recorded with numerous legendary musicians, including John McLaughlin, Sonny Rollins, and Stephane Grappelli. of the opening ensemble section and are not used in the improvisation.

First, a word on fingering. I'm from the "left-hand thumb" school, but I recommend that you experiment with a variety of fingerings. In the places where I use my thumb, try employing either a full barre with your 1st finger (and then pluck the appropriate notes fingerstyle), or playing the bass notes with your 1st finger and sound the notes with a single pick-stroke across the strings (damp the unused strings with your left hand). Observe that the left-hand thumb is indicated in bars1, 4, 7, and 11.

The chord symbols might seem a bit strange. For example, the 9th chords at bar 2 have the 3rd on the second string, and there is no 5th—this type of 9th chord is one note away from the I I th form, which is nothing more than a root note with a major triad whose root is a minor ninth above that. For example, for DII you can have a D bass note with a C major triad (C, E, G) above. Also notice the frequent use of the D note on the second string, 3rd fret, which gives the chords a central pitch around which to

Finally, be careful about the first and second endings, and be sure to go back to measure I after you get to bar 4, and then skip bar 4 the second time through. Observe the little rhythmic device of the two successive quarternotes in bars 2, 6, and 9; they're accented.

"Unemployed Floyd" By Larry Coryell A 9 5 medium tempo Gb13 D11 C11 2 20 9 G-13 Ric A 4945 G7 G-7#5 F13 B-11 B 19 G7 A11 A 69 65 G:7#5 B611 C9 See Notational Symbols, page 78 @ 1985 Coryell Publishing, BMI. Used by permission. All rights reserved. MARCH 1987/GUITAR PLAYER



THE LATE LARRY CORYELL WASN'T "JUST" A GENIUS AND AN INNOVATOR. HE WAS ALSO A TIRELESS educator who loved to talk guitar and share creative and technical concepts with other musicians. His Contemporary Guitar columns in *GP* offered a wealth of deep knowledge, all delivered in a friendly, matter-of-fact tone without a hint of pretension or condescension. What a beautiful cat, he was... — MICHAEL MOLENDA



The Official Watch of Rock and Roll

Rock around the clock tonight with the exclusive Stauer Stainless Steel Guitar Watch for under \$100!

s a kid, I stood hypnotized in front of Athe guitar shop window. I stared at the Gibsons, Fenders, Rickenbackers and Les Pauls, lined up like lacquered mahogany and maple trophies. With their smooth curves, each one could produce hot licks, reverb and a wailing solo. The six string guitar is the heart of rock and roll. I'm proud to say that today I feel the same way about the new Stauer Guitar Watch.

We wanted to give our favorite vintage electric guitars their due with an impressive timepiece that captures the excitement of the golden years of rock and roll. The Stauer Guitar Watch is a legendary timepiece with bold, head-turning design and attitude to spare. It's rebellious enough to feel like you're getting away with something.

Meet your new favorite rock star. My only advice to the designers was to make a watch that looks exactly like rock and roll sounds. Big, bold and loud enough to wake the neighbors. It should evoke images of Bill Haley, Buddy Holly, The King and The Boss strumming crowds into a frenzy. But it should also reverberate with the spirit of the world's greatest rock guitar gods like Jimi, Eric and Keith (who was featured on the cover of Rolling Stone magazine wearing a Stauer watch). As you can see, the final product is worthy of a standing ovation.

It's only rock and roll, but we like it. One look at the Stauer Guitar Watch's voluptuous stainless steel body will bring you right back to the glory days of 45 and 33 rpm records. The eye-catching shape of the case recalls the round-bottomed bodies of the greatest vintage electric guitars.

The unique, ivory-colored face features blue Roman numerals on the left of the dial and bold Arabic numbers on the right. Blued, Breguet-style hands keep time while additional complications mark the day, date and month. A date window sits at the 3 o'clock position. Inside, the 27-ruby-jewel movement utilizes an automatic self-winding mechanism that never needs batteries. The watch secures with a genuine black leather band and is water-resistant to 3 ATM.

Guaranteed to rock your world. If you aren't fully impressed by the performance and stage presence of the Stauer Guitar Watch within 60 days, simply return the watch for a full refund of the item price. Presently, we have only less than 200 pieces in stock, so don't hesitate to order! Sorry, no Wah Wah pedal included!

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• Stainless steel case • 27-jewel automatic movement • Date, day and 24-hour complications • Croc-embossed leather strap fits 6 3/4" - 8 3/4" wrist



Music Man Monarchy Series Majesty 6

TESTED BY MATT BLACKETT

FANS OF MUSIC MAN GUITARS, DREAM

Theater maestro John Petrucci, expert craftsmanship, or any combination of the three are no doubt familiar with the Majesty model. The Monarchy Series incarnation on review here has some new tricks up its sleeve, but it kept everything that made the earlier version so great. I tested it through a PRS Sonzera combo and a Kemper Profiler.

Opening the case was a breathtaking, *Pulp Fiction*-style affair, because this guitar is simply gorgeous. The Majestic Purple color is sumptuous and the combo of the gloss top and the matte-finish back is super cool. Every detail on the guitar looks smart and works perfectly, from the awesome toggle switches to the compensated nut to the über-ergonomic knobs. It's

amazing to see so many hip mods to features that so many other builders take for granted.

Amplified, the Majesty exudes all the diversity and precision of its signature namesake. The clever switching system allows you to get humbucker, inner-coil, and piezo tones—plus any blend of them with no fuss at all. The DiMarzio Sonic Ecstasy magnetic pickups have a clear, defined sound both clean and dirty, and splitting them for two-pickup sounds provides just the right dynamic shift for transitioning between a chorus and a verse. The piezo sounds are musical and useful. To my ears, no piezo really sounds like an acoustic guitar, but the timbre has become a legitimate sound unto itself. I was surprised how much I liked blending the Majesty's piezo with the humbuckers on dirty tones,

which resulted in an interestingly detailed tone for distorted arpeggios.

Another great feature is the 20dB boost that you can engage by hitting the mag-pickup Volume knob. This sent the Sonzera into sustaining feedback, but didn't raise the noise floor appreciably. The boost also proved how responsive the DiMarzios are, because even with the substantial increase in gain, both humbuckers still cleaned up admirably; so much so that I might leave the boost on, keeping the volume at 5 or 6 for crunch rhythms and then cranking it for solos.

Although I generally prefer a more curved fretboard than the Majesty's ultra-flat 17" radius, it's impossible to deny the shred-friendly playability of this beast. Three-note-per-string legato runs leap off the stainless-steel frets, huge bends are



silky smooth, and you can absolutely reach every last one of the 24 frets. The whammy system is yet another elegant design and stayed in tune easily, thanks in part to the perfectly straight string-pull that the classic Music Man head-stock affords.

This is an extremely well-thought-out

instrument that could cover a huge array of styles. It comes across as modern, efficient, powerful, stylish, and sophisticated—like a brand-new sports car. It's easy to see why Petrucci and his legions of fans dig the Monarchy Series Majesty, but players of all social strata and birthrights would do well to check out this benevolent ruler.



MAJESTY 6 CONTACT music-man.com PRICE \$2,999 street 1 11/16" **NUT WIDTH** Honduran mahogany NECK Ebony, 25 1/2" scale, 17" radius FRETBOARD FRETS 24 medium jumbo stainless-steel Locking Schaller M6-IND TUNERS African mahogany with maple BODY top Custom John Petrucci Music Man BRIDGE Piezo floating tremolo, made of hardened steel with stainlesssteel saddles. **PICKUPS** Two DiMarzio Sonic Ecstasy humbuckers, piezo bridge pickup CONTROLS Custom Music Man active preamp; push/push Volume for 20dBgainboost,500kpush/push passive tone for custom two-

pickup configurations, .022µF

Flawless design. Wide range of tones. Beautiful cosmetics.

tone capacitor

.010-.046 6.75 lbs

USA

Ernie Ball RPS 10 Slinky,

MONARCHY SERIES

FACTORY STRINGS

WEIGHT

CONCERNS

BUILT KUDOS



Mitchell MS400 and MD400

TESTED BY DAVE HUNTER

A PAIR OF SUB-\$500 IMPORTS

exclusive to the country's largest guitar chain might not whet the average reviewer's appetite, but the Mitchell MS400 and MD400 models available from Guitar Center and Musician's Friend offered some pleasant surprises right out of the box.

For instance, with its glued-in neck, mahogany/maple/rosewood construction, single cutaway, 24.75" scale length, and dual humbucker configuration, the MS400 ticks all the boxes for one of today's major archetypes. Mitchell has also thrown some tasty design touches into

the formula: The deep cutaway is beveled front and back, the Tune-o-matic bridge is partnered with through-body stringing, control knobs are recessed into the top, and the locking tuners feel solid and boast an efficient 18:1 ratio. Beyond all this, there's an impressive coherence of aesthetics too. The way, for example, the double-slash fingerboard inlays are echoed in the swoop of the string ferrules, the headstock tip, and the cover of the dual-action trussrod; while flame maple binding and a quilted-maple top veneer further dress up the package. The slim-C neck feels great, the fretwork is good, and the guitar

played extremely well after a slight tweak of the trussrod. One note on both guitars: the positioning of the output jack does keep the cord wrapped out of the way, as intended, but makes it impossible to set the guitars on their butt-ends to lean against the amp. And if you step on the cord, you're likely to tear a chunk of wood from the side of the guitar's body rather than just pull out the plug.

I tested the MS400 through a plexi-style head and 2x12 cab and an AC15-inspired 1x12 combo. No surprise that at $13.28k\Omega$ the bridge pickup is predisposed toward serious rock.





There's not a lot of sweetness or chime here, even at cleaner amp settings, but a barking, slightly nasal squawk that drives the amp hard for aggressive rhythm. It really shined, though, with a JHS Angry Charlie distortion pedal applied for hairy, squealing lead tones. The neck pickup (7.94k Ω) achieves some rich, bluesy semi-clean tones and sings beautifully through overdrive, while both pickups' split-coil sounds are admirably bright and jangly.

MD400

While the MS400 oozes modern design, its double-cutaway sibling, the MD400, has an even more contemporary appearance, and is significantly more "rawk" besides—or so it would seem at first glance. Not only do the long body horns lean toward a shred-certified look, but the pickup selection—a full-size dual-blade humbucker in the bridge position and a single-coil-sized humbucker in the neck—imply more incendiary potential, although the bridge unit's reading of $10.86 \mathrm{k}\Omega$ (less than that of the MS400's) might run counter to that assessment. Other than noting the body shape, the tasteful multi-ply binding, the offset

abalone-dot fingerboard inlays, and the 25.5" scale length with 24 medium-jumbo frets and a flatter radius, there's less to say here because body and neck woods, hardware, and control layout all echo that of the MS400. Likewise, construction and playability were similarly good after a very slight trussrod adjustment.

Perhaps surprisingly given the optics here, the MD400's bridge pickup displayed more nuanced musicality and greater harmonic sparkle than that of its single-cut sibling, but the slightly gentler output and more overtone-laden 25.5" template likely had something to do with that. Via distortion, this translated to a little extra sting in the upper mids and highs, with an eviscerating bite when hit hard, which really helped the guitar cut through the mud. The neck pickup was rich and open, with just a little grit amid the airy warmth to lend texture to arpeggiated balladry or bluesy riffing. Tasty stuff. Ultimately, both guitars offer a lot in all essential departments for looks, playability, and tone, and provide excellent bang for the buck—again impressing me with what our friends offshore can achieve at this price point. 1

MS400 CONTACT mitchellelectricguitars.com PRICE \$449 street, with trans-finish quilt top; \$399 in solid colors **NUT WIDTH** 1.65". Graph Tech Tusq XL NECK Mahogany with scarf joint, 24.75" scale FRETBOARD Rosewood, 11.8" radius FRETS 22 jumbo TUNERS Die-cast locking BODY Mahogany with quilted-maple veneer BRIDGE Tune-o-matic style with through-body stringing PICKUPS Two Alnico V humbuckers CONTROLS Individual Volume and master Tone controls, 3-way switch, push-pull switch on Tone pot for coil-splitting FACTORY STRINGS D'Addario, .009-.042 6.8 lbs WEIGHT BUILT China **KUDOS** Good build quality and impressive looks for its price. Confident playing feel. Entirely usable set of tones. CONCERNS Jack positioning not ideal (see text). MD400 PRICE \$449 street with trans-finish quilt top; \$399 in solid colors **NUT WIDTH** 1.65", Graph Tech Tusq XL NECK Mahogany with scarf joint, 24.75" scale FRETBOARD Rosewood, 15.75" radius 24 medium-jumbo **FRETS TUNERS** Die-cast locking BODY Mahogany with quilted-maple veneer BRIDGE Tune-o-matic style with through-body stringing PICKUPS Full-size Alnico V dual-blade humbucker (bridge), single-coilsized humbucker (neck) CONTROLS Individual Volume and master Tone controls, 3-way switch, push-pull switch on Tone pot for coil-splitting D'Addario, .009-.042 FACTORY STRINGS 6.9 lbs WEIGHT China BUILT **KUDOS** An elegant and easy playing electric for the money. Able rock tones aplenty. CONCERNS Jack positioning not ideal (see text).

GEAR



TESTED BY SAM HAUN

STRAIGHT OUT OF THE BOX, THE NEW

Danelectro '66 is a striking thing to behold. Our test guitar arrived dressed to kill in a rich and vibrant two-tone sunburst finish that's a total knockout. The retro headstock looks really cool, but the guitar's centerpiece is definitely its 1960s-inspired, reverse double-cutaway shape with offset horns. The bound, semi-hollow alder body also has a stylish deep-carved top with an f-hole, a center block, and a well-planned layout with easy access to the controls. Though the guitar is light—weighing in at just 7 lbs—it's ever-so-slightly neck heavy, but after a few minutes of playing I was able to get a feel for where its balance point is located.

The '66's bolt-on maple neck feels comfy,

and it sits super tight in the neck pocket. The dark-rosewood fretboard is silky smooth, and the fretwork is excellent, with no rough edges or uneven frets. There was a hint of fret buzz around the fifth fret on the low E and A strings, but this was more of a setup issue than a construction one, and it could be easily adjusted. Intonation is excellent, none of the hardware rattles or feels cheap, and the tuners are smooth and accurate. In fact, the latest models from Danelectro appear to be approached far differently than the instruments first produced when the Evets Corporation initially revitalized the brand. Those guitars were inexpensive, unique sounding, retro cool, and vibey, but they certainly weren't built like tanks, nor did they sport a high level of quality control. With the recent Editors' Pick winning '64 and the '66, however, Danelectro is manufacturing solid instruments with outstanding quality, playability, and tone—and they still cost far less than \$1,000.

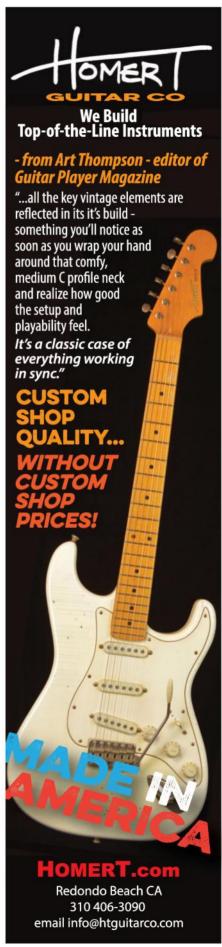
Speaking of tone, the '66's beauty doesn't only run skin deep. The Danelectro dual-lipstick humbucker in the bridge and the Danelectro neck-position single-coil deliver tons of personality, grit, versatility, and tonal range. Tested under fire during an album-recording session through a Fender Blues Junior, a Ceriatone JTM45 Clone with two 12" Celestion Greenbacks, and a 4-watt Vox AC4C1, the '66 sounded great through all of them—no matter which pickup I selected, or how hard or soft I



attacked the strings, or whether I dialed back the Master Volume and Master Tone knobs or ran things full up. Through the Blues Junior, the guitar produced single-coil sweetness, or jazzy warmth, or gruff and harmonically rich bluesy bite. Plugged into the Ceriatone, the '66 covered all the bases from great big clean tones to gritty Chuck Berry-esque double stops to classic '70s and '80s hard-rock riffing. When using the little Vox amp, the '66 was either convincingly emulating classic British invasion sounds—albeit with a touch more grind—or absolutely destroying the world with a scorching-hot distorted tone.

We had brought a bunch of guitars to the session, but once everyone had heard the '66, it ended up becoming the guitar of choice. It even got as much studio time as my beloved, 25-year-old Les Paul. After the session, I kept returning to the Danelectro '66 to play around the house, at band rehearsals, and at a recent gig where it garnered lots of attention from the other guitarists on the bill. Any guitar that sounds and plays this good—and oozes such uber-cool vibe—deserves an Editors' Pick Award.

| '66 | |
|-----------------|-----------------------------------|
| CONTACT | danelectro.com |
| PRICE | \$699 street |
| NUT WIDTH | 1.65" |
| NECK | Maple, bolt-on |
| FRETBOARD | Rosewood, 24.5" scale, 12" radius |
| FRETS | 22, plus zero fret |
| TUNERS | Danelectro vintage-style |
| | stamped steel with oval buttons |
| BODY | Alder, semi-hollow with center |
| | block |
| BRIDGE | Wraparound with adjustable |
| | saddles |
| PICKUPS | Bridge: Danelectro dual lipstick |
| | humbucker (bridge), Danelectro |
| | single-coil (neck) |
| CONTROLS | Master Volume, Master Tone |
| | with push/pull coil split, 3-way |
| | selector |
| FACTORY STRINGS | D'Addario EXL110, .010046 |
| WEIGHT | 7 lbs |
| BUILT | Korea |
| KUDOS | Well crafted. Great tone. Good |
| | looks. Superior playing feel. |
| | Vintage vibe. |
| CONCERNS | None. |



Fishman SA330x Combo+ Performance Audio System

TESTED BY PAUL SCHIMMELMAN

FISHMAN'S SA220 PERFORMANCE

System has a great reputation among solo performers and small groups, and the new SA300x Performance Combo+ System on review here addresses user needs for greater low-end support as well as expanded input options. The SA330x Combo+ System consists of three primary pieces, all of which must be purchased separately: The SA300x unit itself, the SA Sub subwoofer, and the SA Expand 4-channel mixer

(which ups the overall channel input count to six). The main component is a 330-watt, full-dispersion line array system with six 4" mid/woofers and a 1" neodymium soft-dome liquid-cooled tweeter. It has two combo 1/4"/XLR inputs, and its controls include channel Gain, EQ (Low/Mid/High), four reverb options with Level controls, and anti-feedback EQ notching. The SA Sub packs its own 300-watt power stage, 8" speaker, and selectable crossover. It also has



| SPECIFICATIONS | | |
|----------------|--|--|
| SA330X | COMBO+ | |
| CONTACT | fishman.com | |
| PRICE | SA330x, \$999 street; SA Sub, | |
| | \$549 street; SA Expand mixer, \$169 street | |
| INTERFACE | (SA 330x) 2 mic/instrument | |
| INTERN ACE | channels with XLR/TRS combo | |
| | inputs. 3-band EQ and phan- | |
| | tom power available on each | |
| | input channel. Balanced XLR Di | |
| | outputs for input channels and | |
| | main mix. Footswitch input for | |
| | controlling Channel Mute and | |
| | Reverb Mute (footswitch not | |
| | included). Phase and Notch fil- | |
| | ters. Aux stereo input. | |
| POWER | 330 watts; SA Sub 300 watts | |
| SPEAKERS | 7-driver line array (SA330x). | |
| | SA Sub has one 8" speaker | |
| EXTRAS | Mounting poles/hardware, deluxe | |
| | carrying case and mounting | |
| | hardware. | |
| WEIGHT | 50 lbs. SA330x: 20 lbs, SA | |
| | Subwoofer: 30 lbs | |
| BUILT | Designed in the U.S., assembled | |
| | in China | |
| KUDOS | Clear Fishman sound in a highly | |
| | portable and modular package. | |
| CONCERNS | Carry bag has no space for stands | |
| | and cables. | |

an optional pole mount for the aforementioned line array and add-on mixer.

I was very interested to check out the SA330x Combo+ on a live gig, as I've had quite a lot of experience with its older sibling, the SA220, using it with violins, guitars (acoustic and electric), and vocals in a variety of live settings. On some gigs, the bands I've played with have had as many as three SA220s running at the same time, and they have always delivered the goods on stage.

I tested the full SA330x Combo+ rig in a medium-sized outdoor environment with violin, two guitars, keys, and vocals, as well as bass and drums (which were not run into the Fishman), and was very happy with the results. The SA330x Combo+ offers clear, studio monitor-type sound that allowed everyone in the venue to hear the band clearly without blowing away the front row. The players were also better able to hear each other without having to crank up their individual amps. Vocal mic feedback was quickly addressed with the effective feedback notch controls, and it was easy to make individual



instrument level and EQ adjustments on the fly. However, between the small control labels and the non-lighted pushbuttons, it can be hard to see the status of some functions in low light.

The SA330x's carry bag handles only the line-array unit and does not offer any place for the mounting hardware. Secondly, it's a small issue, but Fishman opted to use a flat-ribbon

CAT5 cable (more commonly found in data network applications) to connect and phantom power the expansion mixer. It's an entirely acceptable technical solution for this application, but if the cable ever gets lost (imagine, musicians ever losing cables!) it might be difficult to quickly find a replacement. (Fishman says that flat-ribbon Cat-5 cable can be found at most any electronics store or online. Ethernet cables can also be purchased at variable lengths—up to 30-plus feet—and perform without any signal degradation.)

Thanks to its highly useful updates, Fishman's new SA330x Combo+ is definitely an advancement over the venerable SA220. The low-end enhancing subwoofer and 4-channel mixer are welcome additions that further the system's ability to deliver what it promises: clear, well-dispersed sound that can handle a full band. Factor in the attractive price of the complete package (a little over \$1,700 street) and the SA330x combo+ is well worth considering if you're in the market for a compact P.A. system.



GEAR



Mesa/Boogie Triple Crown TC-50



TESTED BY ART THOMPSON

MESA'S RECENTLY INTRODUCED TC-50

presents the company's vision of a three-channel amp with new circuits that are optimized to deliver exceptional clean to massively overdriven tones. The TC-50 packs a ton of features, including a built-in CabClone amp load/speaker simulator, MIDI programmability, a Bias switch for easy tube swaps, independently adjustable reverb on all channels, and footswitchable channel-select (also switchable from the front panel), solo boost, reverb bypass, and effects loop on/off. The rugged switcher connects via a 6-pin cable and features LED indicators and metal stomp buttons that give a positive "click" when pressed.

Our review amp was outfitted with two EL34 power tubes. A biasing switch makes it easy to switch to 6L6s for a beefier response, or to a pair of 6V6s to cut the power in half, while also enjoying the compressed, twangy sparkle that 6V6s are known for.

The Clean channel on this amp sounded very clear and dimensional with humbucker

and single-coil guitars. A Drive/Normal switch sets the gain structure for crystalline tones or slightly grainier textures, and the high headroom in either mode proved great for the pedals I used, which included a Diezel V4, an EHX Synth 9, a GFI Specular Reverb V2, a Joe Gore Cult, and a TWA Dynamorph. The tube-driven spring reverb is beautiful-sounding whether used to add a whiff of dimension or slathered on to create a big wash of reflection.

Moving into distortion territory, the Lo channel goes at it with soaked-in-harmonics grind as the Gain knob is turned up. The 12AX7-fueled circuit is very responsive to changes in guitar volume, allowing for easy sweeps between stringy rhythm sounds and sustaining solo tones, and the two switchable modes give you a choice of a louder and more aggressive response in the Tight setting or a softer vibe in the Normal position. This channel's voicing is such that I could set the EQ knobs around halfway, and simply adjust the Gain and Presence as needed to get cool tones with a Tele, a Les Paul, or an Epiphone Firebird.

| * | | |
|--------------------|--|--|
| TRIPLE CROWN TC-50 | | |
| CONTACT | mesaboogie.com | |
| PRICE | \$1,799 street; rackmount version | |
| | \$1,799 street; 1x12 combo \$1,999 | |
| | street | |
| CHANNELS | 3 | |
| CONTROLS | (Clean channel) Gain, Master, | |
| | Presence, Bass, Mid, Treble, Drive/ | |
| | Normal switch. (Lo channel) | |
| | Gain, Master, Presence, Bass, Mid, | |
| | Treble, Tight/Normal switch. (Hi | |
| | channel) Gain, Master, Presence, | |
| | Bass, Mid, Treble, Tight/Normal | |
| | switch. Global Output and Solo | |
| | controls. (Rear panel) Bias switch | |
| | (EL34/6V6,6L6). Speaker on/off | |
| | and $4\Omega/8\Omega$ switches. 3-position | |
| | CabClone switch (Vintage/Open/ | |
| | Closed Back). Ground-lift switch. | |
| POWER | 50 watts with EL34s and 6L6s; | |
| | 25 watts with 6V6s | |
| TUBES | 6 x 12 A X 7, 1 x 12 A T 7, 2 x E L 3 4 (can | |
| | also use 6V6 and 6L6 tubes) | |
| EXTRAS | MIDI w/channel selector and | |
| | store switch (256 presets). | |
| | Footswitchable Solo level con- | |
| | trol and tube spring reverb on | |
| | all channels (6-button foot- | |
| | switch included). Reverb Level | |
| | controls for each channel. Two | |
| | 1/4" speaker outs, XLR DI out, | |
| | 1/4" headphone out, 1/4" line out. | |
| | MIDI In, Out/Thru jacks. | |
| SPEAKER | Tested with Mesa 2x12 Rectifier | |
| | cabinet. | |
| WEIGHT | 35 lbs | |
| BUILT | USA | |
| KUDOS | Excellent clean to extremely | |
| | overdriven tones. Built-in Cab | |
| | Clone amp load/cabinet simu- | |
| | lator. MIDI controllable. Multi- | |
| | function footswitch included. | |
| CONCERNS | None. | |



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GEAR >>> MESA/BOOGIE

Full-scale sustain is attained via the TC-50's Hi channel, which, despite having a ridiculous amount of gain, is touch-responsive and preserving of the guitar's sonic character. Here too, the Tight setting delivers the most aggressive tones, while the Normal position is smoother and slightly more compressed in feel. Obviously, with its searing sustain and chunking low-end delivery, this channel is optimized for hard rock and metal, but it's very useable for other styles too. I dug it for slide, and it sounded great for ampedup blues and jazz/fusion-y stuff as well. Worth noting too, is that the amp stays very quiet even when churning out huge amounts of distortion.

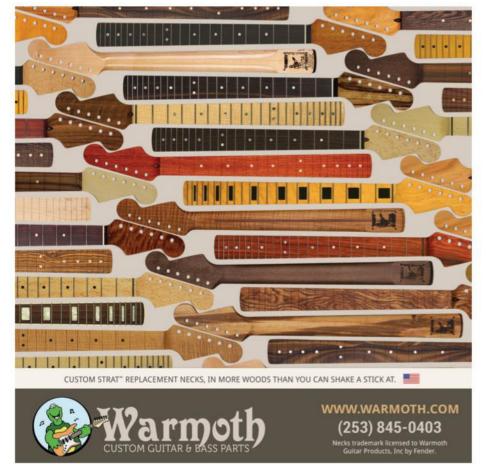
Throughout it all, the CabClone proved very useful whether listening through headphones or sending a direct signal to a mixer. The built-in amp load lets you run the amp with the speakers switched off, while allowing the power tubes to be driven hard to get their coloration into the brew. The three cabinet simulations are handy for recording, and even on smaller gigs I dug the expansive sound obtained by running the amp



though a closed-back Mesa 2x12 cab while feeding an "open-back" signal to a P.A.

Factor in its MIDI capabilities, and the TC-50 is an insanely flexible amp that will enable you to get your rock on whether your tone tastes lean toward Andy Summers, Angus Young, or Alexi Laiho. Between its sparkling cleans and furious

overdrive, there are plenty of great sounds in this amp that can fill the bill for blues, jazz, country, and a whole lot else. Typical of all Mesa amplifiers, the TC-50 provides a tremendous amount of bang for the buckage, and is a must-play if you're looking for a single-amp solution for everything you do.





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Avatar By Fane M65 & H75 12" Speakers

TESTED BY DAVE HUNTER

WITH FANE'S GUITAR SPEAKERS

rebounding in the market in recent years, Idahobased Avatar Speakers decided to approach the British maker about creating two bespoke 12" models for exclusive distribution. The aim was to capture two perennially popular flavors of genuinely U.K.-made tone at player-friendly prices. The Avatar M65 by Fane has a 35-ounce ceramic magnet, a 99dB sensitivity rating, and 65-watt power handling. It is voiced roughly in the mold of the "beefed-up Greenback," which is to say it's not entirely dissimilar to Celestion's G12-65 or M65 Creamback, but rendered with Fane's own distinctive character. The H75. with its 59-ounce magnet, 100dB sensitivity, and 75-watt capability, shoots for the "heavy magnet" formula of the G12H and H75 Creamback, but again with Fane's own je ne sais quoi.

I tested the pair in a 2x12 cab with both open- and closed-back options, and wired for individual speaker connection, using modified

JTM45-style and AC15-style amps, with a wide variety of single-coil and humbucker guitars. Both speakers achieved Avatar's goals beautifully, very much as described, but the secret sauce is in the Fane part of the equation, which I heard, to put it simply, as a little extra punchiness, and a shifting of the midrange bark somewhat more toward the lower-mids spectrum in each speaker. The M65 has that familiar easy breakup, softer low end, and crackly-crunch when pushed, making it a great speaker for anything classic-rock derived. The H75, on the other hand, has more tightness and cutting power; more of a slap in the face from the highs—and a firmer low end, with greater note clarity overall. Tested together, wired in series, they also made a great mixed pair, each greatly complementing and enhancing the characteristics of the other. All in all, the M65 and H75 comprise two great new offerings from Avatar, and are both well-conceived British-speaker alternatives. 3

AVATAR M65 12" BY FANE CONTACT avatarspeakers.com PRICE \$119 street MAGNET 35-ounce Ceramic POWER HANDLING 65 watts RMS IMPEDANCE 8Ω as tested (16Ω also available) SENSITIVITY FREQUENCY RANGE 70-5,000Hz **VOICE COIL DIAMETER 1.75"** BUILT KUDOS Great "Greenback-ish" tones with an alternative voice and stout power handling at a good price. CONCERNS None. **AVATAR H75 12" BY FANE** \$129 street MAGNET 59-ounce Ceramic POWER HANDLING 75 watts RMS IMPEDANCE 8Ω as tested (16Ω also available) SENSITIVITY 100dB FREQUENCY RANGE 70-5.000Hz VOICE COIL DIAMETER 1.75" KUDOS Firm lows and excellent note clarity. CONCERNS Slightly spikey in the highs with some brighter guitars and amps.

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GEAR



>>> WHACK JOB

1967 Teisco V2T Flying Wedge

BY TERRY CARLETON

I HAVE BEEN HAUNTING MUSIC STORES

since I was a kid back in the '60s, and I still get that same sense of wonderment-like. "What will they come up with next?" Guitars aren't just tools to me. They never were. They weren't simply the conduit between a player and musical expression—they were an extension of the player's overall image. A guitar had to look like it belonged on stage. For example, I remember mildly resenting guys who used ES-335s in a rock setting, because those guitars looked too tame for rock and rock—at least to me.

But there's no argument in my mind that the Teisco V2T was meant for the stage. Originally introduced by EKO, and known as the

> Rokes model-it was designed for the groovy, Italian psychedelic band of the same name (1963-1970)—this guitar never really "took off," if you catch my drift. That said, according to Teisco's 1968 catalog, the V2T was their "Hit of the Season." Whatever its ultimate fate, the original design by EKO, and this somewhat rarer Japanese copy that flew under many nameplates (Kingston, Kawai, Checkmate, Teisco),

WEIRDO FACTOR

The name says it all—the Flying Wedge—as the rocket-ship shape is everything here. "Ground control to Major Tom?" Except for the cosmetic design, this guitar is pretty standard fare for Teisco.

PLAYABILITY & SOUND

The V2T solidbody guitar came with an adjustable Canadian-maple neck, a rosewood fretboard, and 20 frets (plus zero fret). It's not as playable as some models from Teisco's Spectrum series, but with the right neck angle, this narrow-ish neck plays pretty well. There are two Teisco single-coil pickups with on/off switches, as well as a Master Tone and Volume control. The tones are almost Fender-y—although the bridge pickup gets very snarky and garage-band-like, and it's especially fun with overdrive. The tremolo bar is really only good for wiggling the last chord of a song, because touching it will force you to retune almost immediately.

VALUE

I rate the V2T as "collectible, but not valuable." You can find these models going at auction for between \$500 and \$600. In 1968, the catalog had them selling new for \$54—approximately \$392 in 2017 money—so the Flying Wedge hasn't exactly zoomed up the "appreciation stratosphere."

WHY IT RULES

The V2T is light, produces a fun and trashy sound, and it looks retro fantastic. You can also baffle your so-called bar-genius "musicologist" friends by calling it the "Rokes Model" and seeing if they can identify the group's big '60s hit. (Cheat code: It was "Piangi con Me," June 1966, which was re-recorded by the Grassroots as "Let's Live for Today" in 1967.)

Please feel free to contact me at rtcarleton@ gmail.com with photos of your rare weirdos. Who knows? Your own whack job could find its way into this column!





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GEAR

>>> CLASSIC GEAR

The 1962 Gibson Les Paul/SG

BY DAVE HUNTER

CONSIDERED FROM A 21ST-CENTURY

perspective, it's pretty incredible that two of the most popular electric guitars ever produced survived a stormy confluence of apathy and incredulity at the time of their origins to become top-tierrockicons. As hard as it is to believe today, the original single-cutaway Les Paul Standard was deleted from Gibson's catalog after 1960 due to a general lack of popularity and declining sales, only to be replaced in 1961 with a new design that had a radical look that Les himself vehemently objected to. But while we know the single-cut, maple-topped Les Paul would eventually come back with a vengeance to become the most valuable standard-production electric guitar of all time, its replacement—despite Les' own objections—would be an almost-overnight success in its own right.

Although it still carried the Les Paul Standard model name in Gibson's 1961 catalog, the guitar that would soon be known simply as the SG was an entirely different beast. Sure, it had two of Gibson's hallowed "Patent Applied For" humbucking pickups (which themselves had evolved slightly by 1961), a similar control layout, and trapezoid inlays on its bound rosewood fingerboard, but otherwise it had very little in common with the sunburst '58-'60 Les Paul. The weighty single-cut Les Paul's thick mahogany body with carved maple top gave way to a thin slice of pure mahogany, which received optimum upper-fret access via its asymmetrical dual cutaways, and a devilishly modern look thanks to a pair of pointed horns and beveled body edges. This new Les Paul Standard wasn't nearly as modernistically outré as the short-lived Flying V and Explorer that had preceded it, but it had more forwardlooking aesthetics than just about any other guitar from a major manufacturer.

The balance worked, and the new Les Paul Standard made its mark on the guitar world pretty quickly. Gibson shipped 1,662 units of the redesigned model in 1961, compared to a mere 635 single-cut Les Paul Standards in 1960. In 1963 Les Paul's endorsement deal expired and the guitar became known simply as the SG

the guitar became known simply as the SG Standard (purportedly the artist let it lapse intentionally so it wouldn't become part of the financial settlement in his divorce from Mary Ford; he would re-up in 1968, when the single-cut would also return).

When loaded with a pair of PAFs, a 1961-'62 Les Paul/SG does express sonics similar to those of a '57-'60 Les Paul—with a rich, chewy humbucker sizzle, plenty of depth, and good punching power. But its thinner, all-mahogany body and slimmer neck also lend a snappier element to the tone, with a

little more focus on upper-midrange honk

rather than the beefy single-cut's lower-

midrange thump. When played aggressively through a cranked vintage or high-gain modern amp, an SG will still scream and wail enough to satisfy most forms of heavy-rock stylings—as everyone from Tony Iommi to Eric Clapton to Angus Young to Frank Marino would ably prove—while Pete Townshend, Robbie Krieger. and Carlos Santana delivered much seminal work on the P-90-equipped SG Special. One quirk of the early Les Paul/SG is its "sideways vibrola." officially known in the Gibson catalog as the Deluxe Vibrato. Although the creation did its vibe thing well enough, it tended to be a nightmare for tuning stability in many cases; leave it alone and you were probably okay, but it was still a clunky load that might dampen your tone or throw everything out of whack if you accidentally bumped it while playing. As a result, the few early examples of Les Paul/ SGs loaded with stopbar tailpieces tend to be

highly prized, and many players modified their

guitars to these specs to obtain a more solid

and sustaining performance. 1



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ANDY McKEE

REVEALS HOW HE RULES A SOLO STAGE



GP 50TH ANNIVERSARY EXCERPT

CLASSIC *FRETS*! HAPPY TRAUM ON TRAVIS PICKING FRAMUS LEGACY FD28 CUTAWAY

FRETS

LIVE FROM YOUTUBE!

ANDY MCKEE GOES FROM SIGHT TO SOUND WITH A CD OF HIS SOCIAL-NETWORK HITS

BY JIMMY LESLIE

"TONIGHT, I WANT TO PAY TRIBUTE TO A few guitar heroes," says Andy McKee during a show presented by GP at Yoshi's, Oakland, on April 5, "and then I'll perform some of the YouTube hits that I've finally compiled together

on Live Book [CGP Sounds]."

It's interesting to consider that YouTube began replacing radio exposure with socialmedia hits in 2005, and one of its breakout guitar stars has had enough enduring success to release what is essentially a "live greatest hits" CD. McKee's studio records have always made for fine listening, but the listener isn't necessarily aware that he is managing multiple parts simultaneously with no overdubsor even a looper—so the live record was long overdue. That said, McKee truly must be seen to be fully appreciated. His YouTube hits aren't staged videos—they are simply shot, real-world performances of a cat from Kansas doing otherworldly things on an acoustic guitar.

McKee's style is an amalgamation of pre-Internet acoustic icons, including Michael Hedges, Preston Reed, and Billy McLaughlin. While McKee tunes by ear between numbers, he fills the time by providing background information on the songs, and the particular techniques he picked up from each influence. He also touches on aspects of his primary instruments, including his big gun—the harp guitar. In that sense, every McKee show is somewhat of a guitar clinic.

Can you please detail your instruments?

All three are Greenfield guitars—a jumbo, a baritone, and a harp guitar—and they all have Novax Fanned Fret fingerboards. The jumbo is a Greenfield G4.2 cutaway with a spruce top and Macassar ebony back and sides—which

sounds similar to rosewood. The G4B.2 is essentially a baritone version of the jumbo made of different back-and-sides woods that I can't recall, and with a top-paint finish that shifts from purple to green depending on how the light hits it. The baritone has a heavier angle on the fanned frets because of its increased scale length. The harp guitar has a standard 6-string neck with fanned frets, and six sub strings. It's based on a design by the Dyer Brothers. Michael Greenfield did some customization such as the beveled upper bout, the multi-scale neck, and sharpening levers. They're cool, because you can raise a string's pitch a half step with the flick of a switchjust like on a traditional harp. I'm working on a new composition where I incorporate those into the piece to change keys at one point.

What are your signal sources?

There are two K&K Pure Mini pickups in the harp guitar: one for the harp side and one for the standard side. They feed through a single jack in stereo, and then I split the signal into a D-TAR Solstice preamp. Channel 1 is the guitar side, and Channel 2 is the harp guitar side. I EQ them a bit differently, and add some reverb to the guitar side, but not the harp side. I use another D-TAR Solstice preamp for the other guitars. The jumbo goes to Channel 1, and the baritone goes to Channel 2. They both have K&K Pure Mini pickups in them, as well. I formerly used the system that also included a microphone, but I had more feedback issues, and I found that the Pure Mini pickup has a great sound all by itself. I stick with that on the road, and I don't usually need a feedback buster in the soundhole.

So you do simple equalization in the D-TAR, and let the house engineer worry about dialing





FRETS

ANDY McKEE

out specific feedback frequencies during soundcheck?

Right. I prefer not to have a hole cut into my guitar for preamp controls, and I like to keep things simple. I just boost the bass and treble a little bit on both channels of the top D-TAR box because the jumbo and the baritone are actually quite sonically

similar. I bump the treble, and reduce the mids and bass a bit on the D-TAR with the harp guitar. I set the D-TARs the same way every night, and then at soundcheck, I'll work with the house engineer to find notes that cause feedback in that particular room. I have a chart on my phone corresponding notes to frequencies, so I can

communicate in the engineer's language to dial them out. I also ask the house for a hall reverb with about two seconds of decay.

Speaking of effects, you're a known user of the ToneWoodAmp acoustic guitar processor. Have you ever tried it onstage?

I'm too afraid to add another component onstage, but I love using it acoustically when I'm backstage, in a hotel, or at home. I typically use the hall reverb with that level set at about 18.

What kind of capos do you use?

I use Shubb's standard acoustic guitar capo, as well as their banjo capo for partial capoing on tunes such as "Rylnn," "Shanghai," and "Away" on the harp guitar.

How about strings?

I use a medium set of Ernie Ball Aluminum Bronze strings on the jumbo. I use almost the same thing for the baritone, except I ditch the highest string-the .013-shift all the others up one slot, and then add a .070-gauge string in the sixth slot. I use a custom Ernie Ball set on the harp guitar. It has such a long scale length that the first ones they sent me wouldn't even reach the headstock, so they made me some extra-long strings. I use a .070gauge-just like on the baritone-for the lowest string, and I usually tune it to G. From there, the gauges go up approximately .004 per string, with the highest being .050. I usually tune that one to G, as well, so it's the same note as playing the third fret of the sixth string on an acoustic in standard tuning. My tuning on the harp guitar changes, but I started out with Stephen Bennett's harp-guitar tuning, and I still use it as a starting point. Low to high, it goes G, A, B, C, D, G. I use standard tuning on the guitar neck.

What's your overall set-list strategy?

I try to keep the show as interesting as possible by moving from instrument to instrument, and from tuning to tuning. I'll start on the baritone, move to the jumbo, and then get out the harp guitar—which I use for specific tunes, because it's such a unique instrument. I have to consider the tunings in context of the general energy flow from song to song. You don't want to make drastic tuning changes. You want to make little changes that don't take too much time

Also, over the past year or so, I've been paying tribute to my guitar inspirations.



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George Benson



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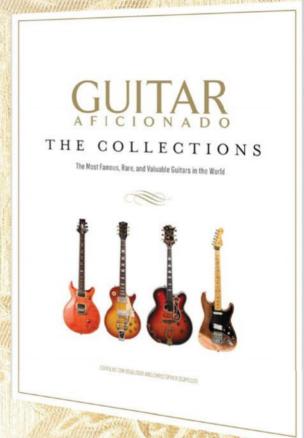
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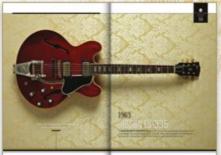
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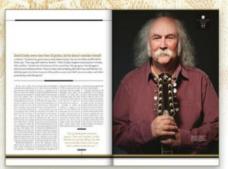
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FRETS

ANDY McKEE

I've had success on the Internet, and a lot of young people have gotten into fingerstyle guitar by seeing me play. They might not have ever heard of Preston Reed, Don Ross, Billy McLaughlin, or even Michael Hedges, so I'm letting people know about them. Preston Reed was the first guy who made me think the acoustic guitar was pretty radical. I'm playing a tune of his called "Tribes" that incorporates a lot of overhand playing on the fingerboard with both hands, as well as tapping percussively all over the body of the instrument. Billy McLaughlin developed the two-hand method of playing melodically with the left hand while playing bass notes on the fingerboard with the right hand. He wound up getting focal dystonia, and losing his ability to play for a while. He is back to playing again now that he's relearned to do everything the other way around as a left-handed player. Imagine that!

I actually discovered Michael Hedges

and the harp guitar in 1997, when I was going through issues of *Guitar Player* from the '80s. Hedges was on a cover, and there was a floppy disc inside of him playing "Because It's There." I'll do that one, and probably "Aerial Boundaries" tonight to honor him for popularizing the harp guitar. I'll do a few of my own tunes as well, such as "Away" from *Joyland*, perhaps "The Friend I Never Met" from *Dreamcatcher*, and "Into the Ocean," which is the first tune I ever wrote on the harp guitar.

You mentioned tuning the harp guitar neck to standard for the start of the show. What are your starting tunings on the jumbo and baritone?

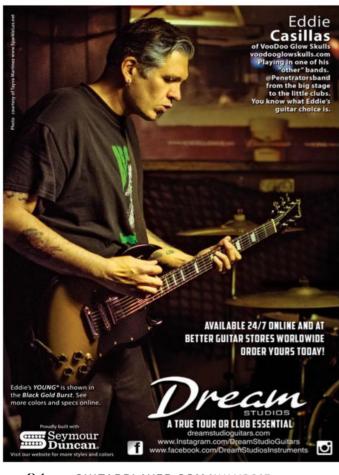
I'll start with the jumbo in dropped D. I've got the baritone tuned up for "Art of Motion," which I originally wrote on a traditional acoustic, but I'm enjoying playing it on the baritone these days. It's a C#min11 tuning. Low to high it goes C#, E, G#, D#, F#, B.

Is that the same tuning you use for "Blue Liquid?"

No, that's also in a *C#min11* tuning, but it's a different voicing that goes *C#, E, F#, B, D#, G#.* That one has an interesting backstory. I was flying to Portugal, and I'd heard it was a good idea to detune your guitar to take pressure off the neck, so that's what I did. When I grabbed my guitar in the hotel that night, I happened to strum it openly and it made a beautiful sound. Upon examination, I realized it was a *C#min11* chord, and I wrote "Blue Liquid."

You have an Ernie Ball clip-on tuner attached to the jumbo. Do you tune mostly by ear, and then checkyour work with the tuner?

I put that on at soundcheck to make sure I was where I needed to be, but during the show I won't rely on it so much. I'll tune by ear to relative pitch. I'm sure I'll be off from A440 about halfway through the night, but that's one of the benefits of playing solo—it really doesn't matter.







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IK MULTIMEDIA iRIG ACOUSTIC STAGE

TESTED BY JIMMY LESLIE

I GOT EXCITED WHEN I FIRST SAW video of IK Multimedia's iRig Acoustic

Stage at the Winter NAMM Show on *GP*'s Instagram feed. The pick-shaped gadget sitting in the soundhole of the acoustic guitar is actually an omni-directional digital microphone that transmits its signal via the cord to a digital preamp/processor attached to the guitar strap. From there, a standard guitar cord routes the signal to an amp or P.A. What a clever innovation! Can it really be that easy to amplify, say, an old steel-string Martin or classical guitar, or a ukulele, or anything else with a soundhole? I was eager to find out.

The iRig Acoustic Stage is easy to use. I clipped the mic into the soundhole of my Taylor 514ce, secured the preamp to the strap, and ran its signal to an AER Compact 60 Tommy Emanuel signature amplifier. Once hooked up, I was able to choose from three presets on the iRig's 32-bit/48kHz processor—Natural, Warm, Bright—by toggling the Tone button. (The same presets are available in conjunction with a Nylon guitar setting.) Natural sounded just that: a straightforward rendering of the Taylor's naturally round tone that did not break up under hard strumming. The Warm setting was

bigger in the low end and lower midrange. When feedback ensued, I pushed the Cancel Feedback button and it automatically cut out most (though not all) of the problematic frequencies. (Up to 10 frequencies can be cut by repeatedly pressing the Cancel Feedback button.) When I switched to the Bright setting, all the woofiness cleared up, and the tone cut through fabulously without being





too slicing on top. When I experienced some feedback at higher volumes that the Cancel Feedback function couldn't mitigate, I simply turned down.

The iRig Acoustic Stage has a standard guitar input jack labeled "Aux" that is designed for tone blending. The Taylor had a Fishman Prefix preamp system onboard, so I sent its signal into Aux, and set the Mix knob in the middle. Using the preamp's onboard controls I was able to dial in a complementary tone by favoring the Prefix's signal, and blending in just a small amount of brighter iRig signal. With a flick of the iRig's Phase switch, that lively dual-source tone became quite serviceable, picking up every element of my percussive playing.

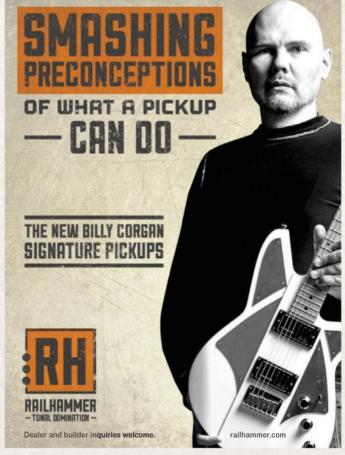
The iRig Acoustic Stage offers endlessly interesting possibilities. I had a blast going down a signal-blending rabbit hole using the Compact 60's dual channels and onboard effects instead of doing all the

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|-------------------|--|
| PRICE | \$99 street |
| CONTROLS | Volume, Mix, Tone (Natural/Warm/Bright/ |
| | Nylon/Calibrate), Phase Switch |
| CONNECTIONS | Dedicated 3/32" iRig Mic input, 1/4" Aux input, micro-USB output |
| POWER REQUIREMENT | Two AA batteries |
| WEIGHT | 3.5 oz |
| BUILT | Italy |
| KUDOS | Innovative design. Quality miked-acoustic tone |
| | in an affordable, non-invasive package. |
| CONCERNS | Some feedback issues. Having the preamp/processor |
| | on the guitar strap takes getting used to. |

blending inside the iRig Acoustic Stage. I didn't get into using its USB output for direct recording, but that's another world to explore. It sure felt nice being able to move about relatively freely while being miked up, although having the iRig's processor affixed to the guitar strap took a bit to get used to. Acoustic purists who can't imagine cutting

any holes in their favorite traditional instruments may find a strange digital bedfellow in the form of the iRig Acoustic Stage, and acoustic-electric enthusiasts should be enthralled to explore its blending potential. For just under a Benjamin, the iRig Acoustic Stage is a striking discovery. Now I can't wait for a wireless version.





FRETS



LEGACY FD28 NASHVILLE SBT CUTAWAY

TESTED BY BOBBY CANNON

WHILE GERMANY'S FRAMUS HAS

focused on bringing its excellent electric guitars to the American market the past few years, the company's acoustic models have been almost invisible in the USA. But Framus made a huge statement that this situation is going to change with a mammoth wall of acoustic guitars towering over their booth at the 2017 Winter NAMM show. There were some fantastic-looking models on display, and we're not yet sure how many will ultimately find their way to U.S. guitarists, but, for now, the revamped and expanded Legacy Series

is ready for its close-up. ("Expanded" is really the key here, as the Legacy Series includes the new Nashville dreadnoughts, as well as folk, parlor, grand auditorium, jumbo, concert, and artist models.)

The first guitar we could get our hands on is the Legacy FD28 Nashville—a beautiful dreadnought with a solid AA Sitkaspruce top, and solid Indian rosewood back and sides. The workmanship on this guitar is comparable to what we've seen on the electric models we've tested: excellent attention to detail, zero finish flaws, firstrate hardware, and nice "luxury" features

such as pretty woods and rounded and polished fret ends. Playability is wonderful. The guitar itself feels comfortable whether you're sitting or standing—an essential feature for me, as I have back issues that make playing some guitars a bit of a chore—and the satin-finished, tiger-striped mahogany neck allows for near-effortless movement all around the fretboard. Intonation is spot-on—I've always been a fan of Tusq compensated saddles for this reason—and the vibey, gold Grover machine heads turn smoothly and hold their pitch, even under heavy strumming.



As I was in pre-production for a new album by my band Discordia, I decided to see if the FD28 Nashville could help drive, sweeten, or add texture to a few tracks. For these tests, I played the guitar acoustically, as well as running its Fishman Prefix Plus T preamp into a recording interface and Fender Twin and Peavey 6505 combos. The acoustic tone presents an articulate chime that's a bit midrange forward. This is great for cutting through band mixes on stage or in a recorded track, but for solo-acoustic playing, I found the mid emphasis a little excessive for my taste. Bass tones are punchy and balanced, but never deep enough to become muddy, and the highs are airy, restrained, and sweet. The overall personality of the FD28 Nashville worked really well for the more somber tracks during the sessions, and it was perfect for arpeggios (whether played with a pick or fingerpicked) and openchord strumming.

For amplified performances, the Fishman preamp offers a fair amount of tone-tweaking options, and I was able to notch out the midrange frequencies that had bothered me a bit when playing the FD28 Nashville acoustically. Through both the Fender and the Peavey—which are, of course, *electric* guitar amps, rather than

amps designed specifically for acoustic playing—the FD28 managed to sound terrific, exhibiting rich mids, taut lows, and subtle highs that fit right in with the album's more effected and modulated electricguitar tones. My entire recording experience with this guitar was one of effortless efficiency, versatile tones, and comfort.

The Legacy FD28 Nashville is an elegant and sophisticated acoustic that's versatile, delivers great sounds, and can cut it on stage or in the studio. I'm certain that finally having the option to check out Framus acoustics here in the U.S. is going to be an immense benefit for all acoustic-guitar players. Willkommen!

Legacy FD28 Nashville SBT Cutaway

| CONTACT | framus.com |
|-----------------|--|
| PRICE | \$1,329 direct |
| NUT WIDTH | 1 3/4", Tusq |
| NECK | Mahogany, C profile |
| FRETBOARD | Tiger stripe ebony, 25.5" scale, 16" radius |
| FRETS | 21 medium |
| TUNERS | Vintage Grover, open gears |
| BODY | Solid AA Sitka spruce top, solid East Indian rosewood back and sides |
| BRIDGE | Tiger stripe ebony, Tusq compensated saddle |
| ELECTRONICS | Fishman Prefix Plus T Preamp |
| CONTROLS | Volume, Notch, Bass, Contour, Treble, Brilliance, Contour Frequency |
| | (250Hz-3kHz), Phase, Tuner |
| FACTORY STRINGS | Cleartone Acoustic, .012053 |
| WEIGHT | 4.4 lbs |
| BUILT | China |
| EXTRAS | Medium-action Tusq saddle, carbon faux hardshell case, feedback buster, |
| | McPherson picks sample pack, limited lifetime warranty. |
| KUDOS | Eye catching. Plays great. Excellent amplified tones. Superb |
| | craftsmanship. |
| CONCERNS | Acoustic midrange frequencies may be a bit too intense for some players. |
| | |

FRETS

CLASSIC ACOUSTIC ARTIFACT

From the original Guitar Player, May 1975



Happy Traum's

Country Rhythm

"Fair and Tender Ladies" is a lovely folk song which has had many treatments over the years, from unaccompanied solo voice to full bluegrass instrumentals and harmonies. I recently made a Travis-style finger-picking arrangement, which I've transcribed below. It should be played at a medium tempo, with a slight bounce. Your thumb can play an alternating bass or a bass/chord pattern - I play a combination of the two, as indicated below

hand near the bridge, or by relaxing the left hand enough so that the strings stop vibrating for an instant. I play the G and Am chords like this:

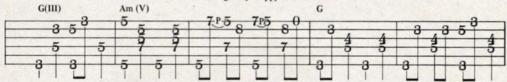


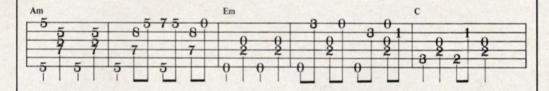
Try damping the bass and chords after you've strummed them, by either touching the strings with the heel of your right in the treble for the melody.

This way, your pinky is free to play the extra notes needed

'Fair and Tender Ladies'

Arranged by Happy Traum











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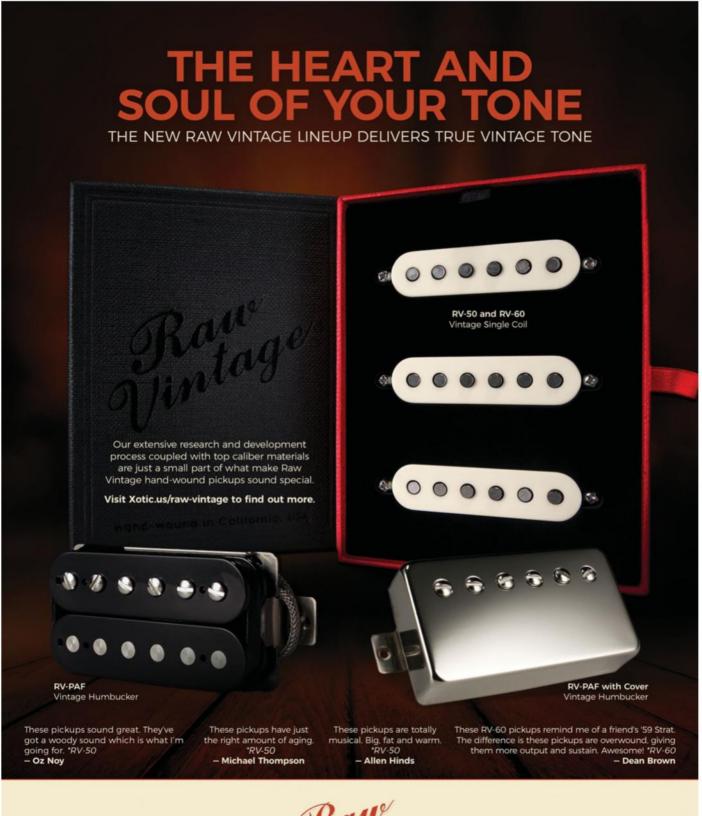
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53



IF YOU WANT TO EXPLORE MERLE TRAVIS-STYLE COUNTRY PICKING-AND, LET'S FACE FACTS, ALL

acoustic guitarists should have some familiarity with the techniques of that musical icon-Happy Traum's Strictly Folk column from May 1975 provides some good tips to get you started. "Fair and Tender Ladies" will teach you how to negotiate alternating bass lines with your thumb, as well as how to free up your pinky for the treble melodies. - MICHAEL MOLENDA



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the Straight Truth About Pickups by Jason Lollar



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I've personally design over a hundred different pickup models, including most of the vintage classics, some obscure works of art from steel guitars to clavinets, and even a few of my own designs that have never existed in the past.

I invite you to visit our website for sound clips, videos and current product information or feel free to give us a call.

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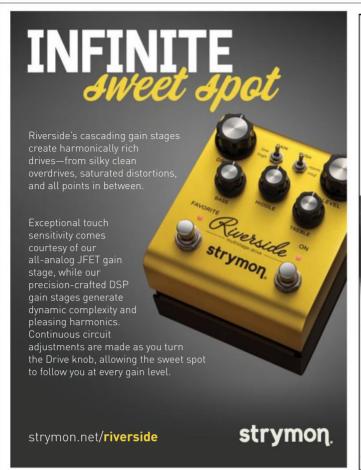
"I've been using a Holeyboard M3 on stage with The Trouble With Monkeys for months, and its "cable-tie" system for securing pedals is genius. I can switch out pedals in two minutes and easily reconfigure the board for GP stompbox tests, as well as specific studio and stage needs."

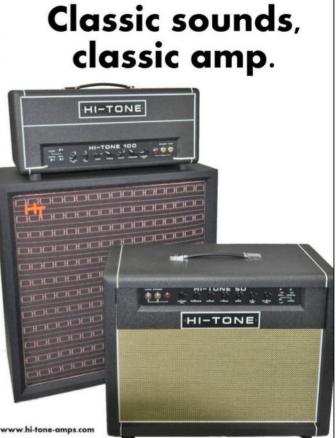
- Michael Molenda Editor-in-Chief, GUITAR PLAYER

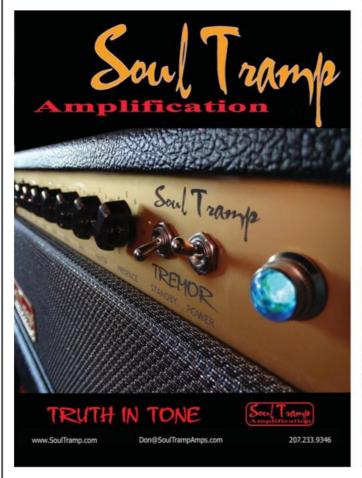




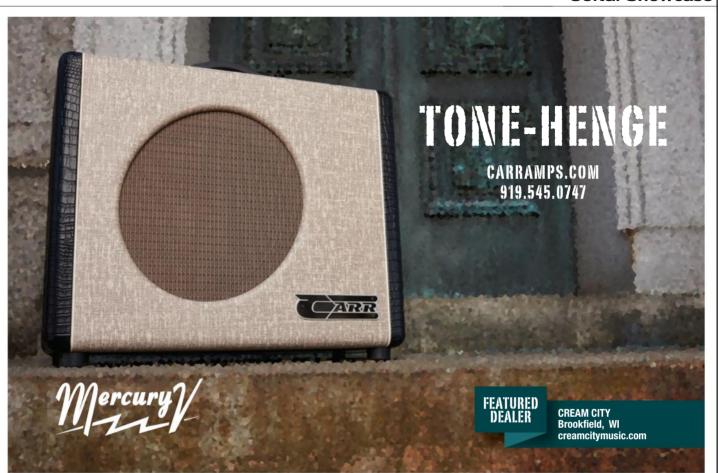
















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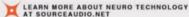
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- Fletcher Stewart, Tone Report Weekly

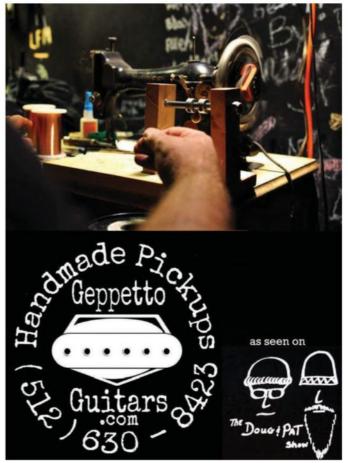


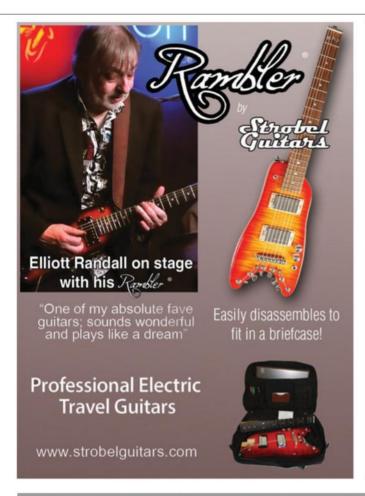
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COVER STORY

OWN YOUR TONE

Continued from page 54

a large pedalboard, while more boost can drive your amplifier into breakup.

A *compressor* is essentially a little amp that keeps boosting your guitar signal as the strings stop vibrating and the natural volume diminishes. This creates more apparent sustain. A compressor can also limit the level of your initial pick or finger attack. The combination of the two makes your playing sound more even and often enhances the sound of modulation effects.

Unlike a simple boost, an *overdrive* adds some natural sounding dirt of its own. It often sounds best in front of an already slightly distorting amp.

A *distortion* pedal provides more gain than an overdrive. Different distortion pedals can create a variety of dirty, amplike tones, even through a clean amp and at low volumes.

Fuzz pedals generally produce a more aggressive, less amp-like distortion. Some sound thicker if used with an already gritty amp, or in front of an overdrive pedal.

Many modern pedals flow across these categories, with wide sweeping gain controls that go from clean boost at one end to near fuzz tones at the other. Here are a few tips that will help your distorted sound, no matter which dirt pedal you choose. When it comes to distortion (and effects in general) less is often more. Heavy gain may sound huge in your bedroom and can be more forgiving for fast playing, but in a band context it can sink you into the mix to the point where that flurry of notes becomes indistinguishable. If you should need extra dirt, running multiple lower gain drive pedals into each other often sounds better than turning the gain all the way up on any single pedal. Also, not all drive pedals are necessarily compatible with all amps; one that works well through your friend's amp may sound terrible through yours and vice versa.

MODULATION

Modulation pedals change their effect over time. They typically have depth controls, which determine the subtlety or extremity of the effect, and a rate control that lets you choose how fast the sound changes.

Tremolo, which continually raises and lowers the signal volume, has become a



Choosing the effect that's best for *you* often comes down to personal preference.

ubiquitous sound in roots music. You will want to watch the tremolo's depth settings, especially if the tempo of its volume change doesn't match the song's. Too much trem can obscure your notes and conflict with the song's rhythm.

The chime of the *chorus* pedal was the soundtrack of the '80s. A chorus creates an effect similar to two guitarists playing the same part at once, or a 12-string guitar. Using a chorus with a mix control will allow you to keep the depth level up while blending in some dry signal for clarity.

One of the earliest guitar effects, a *phaser* pedal varies the guitar signal's frequency over time. Its swirling sound can be heard in every kind of music from funk to metal.

A *flanger* pedal can sound like a swirlier chorus (think early Police records) or a metallic phaser, depending on its settings. Using it with grittier guitar sound will bring out its jet plane-like woosh.

A last hint before we move on: Faster rates on many modulation pedals will simulate an organ's rotary-speaker sound.

AMBIENT EFFECTS

These artificially alter the sonic environment around your notes, emulating everything from a small room to the Grand Canyon.

A *delay* pedal set to shorter delays might fatten your sound, extend the sustain of your notes, or recall the tape-echo "slapback" sounds of the rockabilly era. Longer delays can create epic ambience for power ballad solos, or evoke Lanois-esque moods. Too much delay in the mix can obscure your original signal. Tape delays, analog delays, and their simulations are popular because the frequency response of the delayed notes degenerates rapidly, letting the newly played ones stand out—but even these delayed repeats can mess with the rhythm of the tune if they are too prominent. Using a delay that lets you tap in the delay tempo to match the song will allow you to mix the effect higher.

Reverb, whether of the pedal or amp variety, uses multiple short delays to mimic various size rooms, from a concrete basement to a cathedral. These may be created digitally or by sending the guitar signal down a series of springs and back into the amp. As the delays are not heard discretely, you can typically use more reverb than delay without obscuring the rhythm. Still, the cavernous setting that sounds awesome in your bedroom can make your playing disappear in a band context. Also, consider the natural ambience of the room in which you are performing when deciding whether to add or cut back on delay and/or reverb.

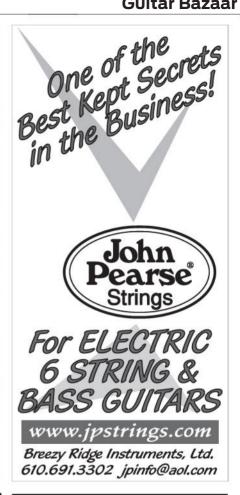
YOU BE THE JUDGE

The most commonly asked question about effects is, "What order should they go in?" A good place to start is compressor, drive pedals, modulation pedals, then ambient pedals, but the actual answer is, "Whatever sounds good to you."

The second most common question is, "What is the best distortion/chorus/delay/etc. pedal?" The answer remains the same. We live in a golden age where there are virtually no "bad" sounding pedals. It is like asking, "Which is better—ketchup or mustard?" Effects are the condiments that add flavor to your musical meal. The point is to trust your ears and not your peers: The pedal that gives you the sound you hear in your head is the best one. Bon appétit.











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CLASSIC COLUMN





Jimmy Stewart's THE COMPLETE MUSICIAN

The Art Of Musical Arranging, Part I

Arranging is a process of adapting musical compositions for performance by individuals or for ends other than those for which they were originally intended. Arrangers and orchestrators refer to it as the creation of a harmonized setting or a reharmonization of an existing melody, whether for voices or instruments. While arranging and orchestration are intimately related subfields of composing, they are functionally distinct. Arranging alters the style, duration, or rhythmic viewpoint of a melody—perhaps transforming a folk melody into a Top 40 tune—while orchestration concerns itself with balancing the instruments used in the arrangement. In practice, the distinction between the two is fine, and the same person frequently wears both hats.

In the next three months, I will highlight some of the essential considerations the arranger must take into account in the creative process of arranging. Like all art, it is highly idiosyncratic; in fact, the perspective with which each arranger views a composition is as idiosyncratic as the piece itself. Many divergent decision-making processes distinguish, say, arranging for films from arranging for live performances, but there are some which are basic to all. Vocal arranging—the type of arranging a session guitarist is most likely to encounter, will serve as a case study in this series.

Of all the positions in commerical music, that of the arranger/ orchestrator is the most highly respected, though not necessarily the most lucrative. Years of practice and constant study are necessary to become facile in the art, and art is exactly what it is, for the arranger functions like a musical poet, understanding emotions and their realization through musical form. In addition to a macro-level awareness of the myriad possible styles and rhythmic viewpoints, he or she must have a precise knowledge of the musical craft—intimate understanding of the tonal qualities of instruments, the emotions they convey, and their weaknesses. A good arranger has an ability to "hear" performances from the printed score and "see" musical notation while listening to a performance. It takes exceptional tenacity to learn and practice the craft.

exceptional tenacity to learn and practice the craft.

Before the macro-level of understanding can be attained, the potential arranger must be at ease when transcribing music from live and recorded performances. Studying scores and analyzing their orchestral styles and compositional development gradually train the eye to become a "visual ear." This is important in being able to develop a style of presentation appropriate to the function of the completed arrangement.

Function is the first thing the arranger must take into account when given a commission. Will it be a background for a vocalist, or an instrumental piece only? Will it be performed live, or in a recording studio? Answers to these questions will determine the balance of instruments within the work.

There are a number of other "givens" the arranger has to consider before the work is begun, all of which constrain the form of the finished work. Some givens imposed by the performers include duration, tempo, style, key, and instrumentation. Other constraints are inherent in the structure of the work itself: mood, timing, melody, lyrics, the form of the tune, and the number of bars you have to work with.

The duration of the completed piece varies with the function of the arrangement. A film or commercial is closely timed, while a live concert arrangement gives more leeway. In a live tune you may have three-and-ahalf minutes to present a complete musical idea, but a commercial will be limited to a 30- or 60-second sketch.

The artist usually has an idea of a comfortable tempo for the piece. Your task as an arranger is to transform this feeling of tempo into more precise metronome indications. Tempo also influences the "bag," or performing style, of the piece. An artist usually specifies that it be in a blues bag, or funk, or soul, or punk, and so on. If it is a vocal piece, the key is the prerogative of the artist, since it depends upon range and stylistic abilities. For an instrumental work, the arranger usually sets the key.

Instrumentation is constrained by a number of things, such as function and the performer's working band. There are obvious differences between developing an arrangement for a full orchestra and one for a quartet. This

given determines the set of possible instrumentational combinations, but it's up to the arranger to select the subset most appropriate to the piece.

The bag of the arrangement also affects instrumentation. A certain amount of regularity in instrumentation is expected to transmit the meaning of the piece within the context of the style. For example, a prototypical ballad is a dialogue between a single voice and an instrument, usually heard against a background of other instruments, none of which produces an especially distinct tone color. Funk suggests another message and another instrumentation: a sort of group chant in which all the instruments are heard at equivalent energy levels, with one or two surfacing strongly from time to time. When these regularities are violated too extensively, the result can be comical. For example, what are your reactions when you hear a symphony playing a scaled-up version of a Top 40 tune? It is the combination of instruments that produces tonal color in the piece, and one schould not wear heads to a wedding.

piece, and one should not wear black to a wedding.

Rather than composing from scratch or on the basis of a hummed melody, the arranger usually has a lead sheet with indications for timing, piano or guitar voicings, melody, and lyrics. Most of the work a pop arranger does is in 4/4 time.

Lyrics also have an impact upon the mood, instrumentation, and time of the piece. They predetermine, at least to an extent, the number of bars you have to play with, since the overall form of the tune must be preserved in the arrangement. By form, I mean the internal structure of the lyrics. One schema for describing the lyrical structure is often used in popular tunes: The A part, usually the first verse, states a problem or introduces a story; A2 is a closeup of that situation. The B or bridge part states the philosophy of the piece, and the A3 part gives the resolution of the life drama presented in A1. These parts can be arranged in several different sequences. For example, the Stevie Wonder tune, "Knocks Me Off My Feet," is an example of an ABA tune with variations in the A part. B parts of tunes are usually accompanied by a heavy backbeat and fuller orchestration for the build needed to highlight the bumper sticker message of the tune, while orchestration for the A part typically aims at producing an element of unresolved tension. This critical match between orchestration and lyrics is what makes or breaks a good arrangement. It requires intuition (usually hard won) and a liberal dose of creativity.

As noted, lyrics set the number of bars required for the piece. In poptunes, verses and choruses are almost universally designed around an eight-bar frame (A and B parts having eight bars apiece). Introductions, codas, and instrumental intervals are freer—segments of two, four, six, or eight bars are considered normal. Typically, the arranger composes the introduction, coda, and bridge intervals for the tune; the goal here is to set the mood of the piece as economically as possible.

After determining to what extent the piece will be constrained by givens, the arranger has a three-stage task. Stage I develops a viewpoint on the arrangement; Stage 2 makes that viewpoint operational; and Stage 3 critically evaluates that viewpoint.

In developing a viewpoint on the melody, the function, key, rhythm, and instrumentation are important concepts. When commissioned to write a vocal arrangement, I request, in addition to the lead sheet, a work tape of the artist performing the melody in the most comfortable key with a simple piano or guitar accompaniment. It is a sort of "character reading" from which to infer their preferred mood for the piece, as well as their range, vocal abilities, and stylistic strengths and weaknesses. If the tune has been recorded previously, I also study the earlier version.

The mood of the piece, available instrumentation, and performers' preferences and abilities determine the eventual key of the piece. Keys convey distinct types of meaning to the listener, analogous to pitch variations in a person's voice when discussing polities as opposed to comforting a child. Precise meanings of key are a matter of personal taste. My own subjective feel for keys that I use in arranging is this: F is an energetic, vigorous key; while A is brilliant, elegant, and joyful; Bb is easy, noble, lacking brilliance; G is easy, rather gay, and commonplace; Ab is soft and veiled; Dbm labored and somber; Gm is melancholy, rather sonorous; and Am is soft, sad, sonorous, and nasal.

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JIMMY STEWART-WHO IS STILL KICKIN' AT 79 YEARS OLD, AND IS THE SUBJECT OF AN

upcoming documentary about his 65-year career in the music business—wrote *GP*'s The Complete Musician column from 1971 to 1981. Stewart's 1,200+ film and record dates as a session ace, his work with Gábor Szabó, his gigs as musical director and/or arranger for artists such as Andy Williams and Lainie Kazan, and his roles as a teacher (Musicians Institute) and educator (as author of more than 20 books) certainly made him the perfect mentor for expanding the musical knowledge of our readers. — MICHAEL MOLENDA



Débastien Lefebyre

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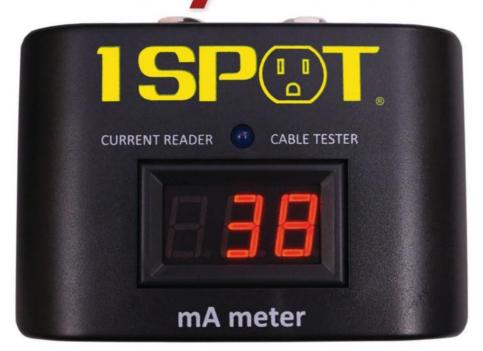
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Just another little innovation from your friends at Truetone.





